

ELECTRONIC SERVICES A/Asia 138 LIVERPOOL RD ASHFIELD 2131 PH 02 97989233 FAX 02 97980017

SECTION

02

COMPONENTS April 2007

Wagner Electronic Services has been supplying accessories to the electronic manufacturing, servicing & installation industry for over 20 years!

We supply an extensive and comprehensive range of passive components including Capacitors, Inductors, Resistors, Filters, Crystals, Metal Oxide Varistors, PTC, Gas Arresters, Thermal Protectors, Fuses, Fuse Holders, Lamps, Globes, Relays, Switches for TVs, etc.

Email: sales@wagner.net.au Phone: +61-2-9798-9233 Fax: +61-2-9798-0017

How to read Capacitor Codes

Code Tolerance (4.010%) r/ 0.35% (A = 5% +7 = 5% +1.1 -+/- 2% 13/390 н 17.5% 15.10% +/ 20% 6% +! +100% (-0%) Z (80%), 20%

Voltage Code

100

250

300

600

1,000

1,200

1,500

2,000

2.500

3,000

4,000

5,000

6.000

8,000

10,000

12,000

15,000

20,000

25,000

A

C

D

E

Ε

G

J

K

L

М

N

P

0

R

S

U

Generally, a capacitor fails under its load conditions but, if removed, it may still be accurately measurable. Grab an LCR or Capacitance meter and simply read off the value of the capacitor you wish to replace. This is assuming the capacitor you are replacing is not damaged beyond the point of a reasonably accurate reading, so double check it. This may at least help you with determining the location of the decimal point or confirming what value you have derived from the jacket code.

Larger capacitors, like electrolytics, simply have the value printed on them clearly, such as 10uF, but smaller types often use an obscure number system on them:

The following is a general guide only and not necessarily applicable to all capacitors!

2 Numbers: These are read as Pico-Farads.

An example: 47 printed on a small disk can be assumed to be 47pF



3 Numbers: The first two are the 1st and 2nd significant digits, then its the multiplier. Most of the time the last digit tells you how many zeros to write after the first two digits (Please note: this is not ALWAYS the case. eg. an extra digit might be indicating an ESR value, so be wary).

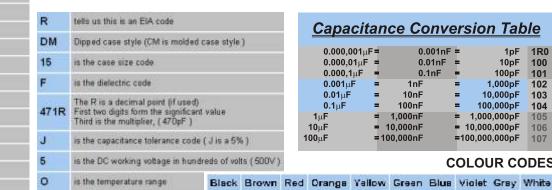
Multiplier: A capacitor marked 104 is 10 with 4 more zeros or 100.000pF which is otherwise referred to as a 0.1uF capacitor.

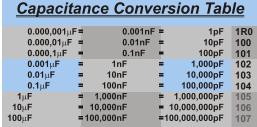
Tolerance code: is generally given by a single letter. Example: a 104**J** is a 10,000 pF with +/-5% tolerance.

Voltage Code: If the voltage is not written directly on the capacitor, then it may be shown as an alpha code. We have listed here for your reference.

Exceptions: There are many more number systems seen on caps than just the above. There is sometimes a letter-number-letter suffix that gives additional details... Example. A 224 Z5U would be a 220,000 pF (or .22 uF) cap with a low temperature rating of -10°C a high temperature rating of +85°C and a tolerance of +22% and -56%! A more popular rating would be the EIA system. It typically starts with an R. Example:

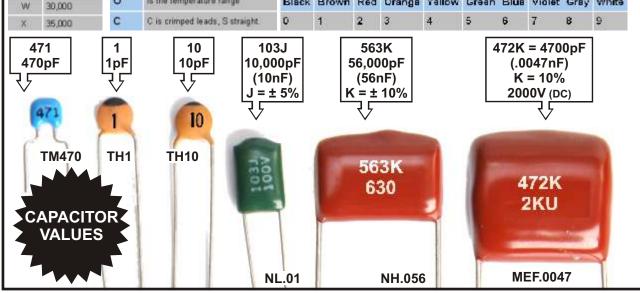
R DM 15 F 471(R) J 5 O (C) This number could mean the following:





104J

COLOUR CODES



2 - 2 Capacitors

PVC TUNERS

To suit AM radios.

To suit AM-FM radios. Code







CERAMIC 500V

General purpose replacement ceramics.

TRIMMER CAPACITORS

Code	Capacitance	Temp Coef'	Colour
TC50	1.5 - 5pf	· NPO	Blue
TC100	2.7 - 10pf	NPO	Blue
TC200	4.2 - 20pf	N750	Red
TC300	5.2 - 30pf	N750	Green
TC450	6.8 - 45pf	N1200	Yellow
TC600	9.8 - 60pf	N1200	Brown



CERAMIC 2KV (&3KV)

The "WR" series has been especially designed for use in pulse circuits such as horizontal and vertical output stages, power supplies etc. Low loss with minimal temperature drift.

Code WR220 WR270 WR330 WR390 WR470 WR560 WR680 WR820 WR1000 WR1200 WR1500 WR1200 WR1500 WR3300 WR2700 WR3300 WR3900 WR4700	Value 220 pf 270 pf 330 pf 390 pf 470 pf 560 pf 680 pf 820 pf 1000 pf 1200 pf 1500 pf 1800 pf 2200 pf 2700 pf 3300 pf 3900 pf 4700 pf
3KV TYPE - St	uit Panasonic
ECK362	*3600 pf



CERAMIC MONOLITHIC 50V

TM SERIES LOW PROFILE CERAMIC CHIP CAPACITORS They are small in size and extremely versatile. Improved specifications, temperatures, tolerences. ent of ceramic capacitors, etc.

Ideal for gene	eral replacem
Code	Value
TM100	100pf
TM220	220pf
TM330	330pf
TM390	390pf
TM470	470pf
TM680	680pf
TM.001	1nf
TM.0022	2.2nf
TM.0033	3.3nf
TM.0047	4.7nf
TM.0068	6.8nf
TM.01	10nf
TM.022	22nf
TM.033	33nf
TM.047	47nf
TM.1	100nf
TM.22	220nf
TM.33	330nf
TM.47	470nf
TM1	1µf



CERAMIC 6KV

Same as "WR" Series, higher V.



QUANTITY DISCOUNTSBuy in bulk quantities and save!
Please enquire for your price today!



SPECIALIST AUDIO CAPACITORS

ALSO SUITABLE FOR OTHER APPLICATIONS

In some cases, a standard capacitor may not be ideally suited, so we have stock of some very specialised caps. "Fast" Caps are High-Current types ideal coupling and filter capacitors in timing circuits & high-end audio. Range was suggested by Customers for valves and by Stones Sound Studio for high-end audiophile applications, etc.



100V 85°C

Code CFR 47	Value 47uf
CER1	1uf
CER2.2	2.2uf
CER3.3	3.3uf
CER4.7	4.7uf
CER10	10uf
CER22	22uf
CER33	33uf
CER47	47uf
CER100	100uf
CER220	220uf

METALISED POLYPROPYLENE 250VDC/160VAC

Non-Inductive, wrap and fill with polyester tape and epoxy resin. Suit communication, high-end audio, X-over, filter networks, etc.

Suit commun	ication, high-en	d audio, X-
Code	Value	www.fa
PMT.01	10nF	
PMT.015	15nF	
PMT.022	22nF	Buy 6
PMT.033	33nF	Pleas
PMT.047	47nF	(Not As
PMT.068	68nF	
PMT.1	100nF	,
PMT.15	150nF	
PMT.22	220nF	
PMT.33	330nF	
PMT.47	470nF	1.00
PMT.68	680nF	188
PMT.82	820nF	100
PMT1	1µF	
PMT1.5	1.5µF	7
PMT2.2	2.2µF	//~
PMT3.3	3.3µF	/
PMT4.7	4.7µF	
PMT5.6	5.6µF	-/4
PMT6.8	6.8µF	
PMT8.2	8.2µF	//
PMT10	10µF	
PMT15	15µF	



POLYPROPYLENE 600VDC "ORANGE DROPS"

"Orange Drops" is the nickname for Spragues classic valve type polypropylene film capacitors, due to their colour and shape. This all new PPL range of 715 polypropylene film capacitors justify this reputation of sound quality and long-term reliability. Suitable for any Guitar and home HiFi valve amplifier restoration.

Code	Value V	/oltage
.001PPL600	.001µF	600V
.0015PPL600	.0015µF	600V
.0022PPL600	.0022µF	600V
.0033PPL600	.0033µF	600V
.0047PPL600	.0047µF	600V
.01PPL600	.01µF	600V
.015PPL600	.015µF	600V
.022PPL600	.022µF	600V
.047PPL600	.047µF	600V
.068PPL600	.068µF	600V
.1PPL600	.1µF	600V
.15PPL600	.15µF	600V
.22PPL600	.22µF	600V
.47PPL400	.47µF	400V



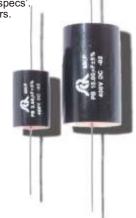


uy Quantities

SOLEN (SCR) METALIZED POLY' 400Vdc/250Vac

Premium Audiophile grade. Made in France. SOLEN Fast Capacitors. **PB** Range. See... www.wescomponents.com/capacitor/solen/pb.htm These capacitors use the highest grade aluminium metalised polypropylene for impressive electrical & mechanical specs'. As used in our HDS audio crossovers.

Code	Value
SCR.15	0.15µF
SCR.27	0.27µF
SCR1	1µF
SCR1.6	1.6µF
SCR2.2	2.2µF
SCR3.0	3.0µF
SCR3.3	3.3µF
SCR3.9	3.9µF
SCR4.7	4.7µF
SCR5.6	5.6µF
SCR6.8	6.8µF
SCR7.5	7.5µF
SCR8.2	8.2µF
SCR10	10µF
SCR12	12µF
SCR15	15µF



SILVER MICA CAPACITORS 500V

Absolute best sounding capacitors for audio, tone and filter circuits, etc.
Also ideal for Oscilators and TX ccts.
Sourced from the USA, for HOT valves.
www.simicelectronics.com MIL-C-5 RS153.
Indian Ruby Muscovite & Epoxy Resin Dipped Superior heat, moisture, shock resistance.
High stability -55 to 135°C Tolorence ±5%
Long life reliability, audiophile sound.

Code	Value
SMC10	10pf
SMC22	22pf
SMC33	33pf
SMC47	47pf
SMC68	68pf
SMC100	100pf
SMC120	120pf
SMC150	150pf
SMC220	220pf
SMC250	250pf
SMC390	390pf
SMC500	500pf
SMC680	680pf
SMC1000	1000pf



SOLEN (SCR) TIN-FOIL POLYPROP' FILM

"SM" AUDIOPHILE PERFORMANCE CAPACITOR

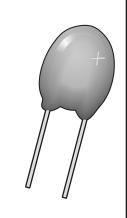
Made in France, these capacitors are renowned for their high electrical performance and stability, insignificant dielectric absorption and no piezoelectric effect. Very low series inductance or resistance and very high current capabilities. Ideal for speaker crossovers, audio coupling and high precision applications in Audio. SSS: "Parallel a tin foil across a large value capacitor and economically speed up the overall transient response of a crossover & speaker."

Code	Value	Type Volts	
TN.01	.01uf	SN 1200V	
TN.022	.022uf	SM 630V	
TN.047	.047uf	SM 630V	
TN.1	.1uf	SM 630V	
TN.22	.22uf	SM 630V	
TN.33	.33uf	SM 630V	
TN.47	.47uf	SM 630V	
TN.68	.68uf	SM 630V	
TN.82	.82uf	SM 630V	
TN1.0	1uf	SM 630V	
TN1.5	1.5uf	SE 400V	
TN2 0	2 Ouf	SF 400V	



Vagner

TANTALUM CAPACITORS





METALLIZED POLYPROP' MKP1 200-250VAC

MKP-1 Series (approval test - IEC384-16 / IEC68) FACO European quality, pulse application, deflection circuits in TV, electronics ballast, timing, oscillators, etc.

Code	Value	Pitch	
250 Vdc / 200 \ 047MKP1-250 068MKP1-250		7μF 15 ΒμF 15	
400 Vdc / 220 \ 15MKP1-400 22MKP1-400	0.15	ıF 15 ıF 15	

TOO TOO! EEU TOO		
.15MKP1-400	$0.15\mu F$	15
.22MKP1-400	0.22µF	15
.33MKP1-400	0.33µF	22
.47MKP1-400	0.47µF	22
.68MKP1-400	0.68µF	22
1MKP1-400	1µF	22
1.5MKP1-400	1.5µF	27
2.2MKP1-400	2.2µF	27

630 Vdc / 250 Vac	
.047MKP1-630	0.047µF 15
.068MKP1-630	0.068µF 15
.15MKP1-630	0.15µF 22
.22MKP1-630	0.22µF 22
.33MKP1-630	0.33µF 27
.1MKP1-1000	0.1µF 22



POLYPROPYLENE 275VAC - LINE CAP

MAINS INTERFERENCE SUPPRESSION CAPACITORS

Self-healing, poly' film dielectric, flame retardent plastic case, designed for radio interference suppression & across-the-line cap' in business machines, monitors, appliances, fans, A/V equipment, thyristor and triac appliances such as dimmers etc. RATING 275V AC 50Hz Vmax 1200VAC, 2000VDC

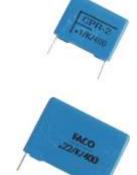
Code	Value
XGV.0047	.0047µF
XGV.01	.01µF
XGV.022	.022µF
XGV.033	.033µF
XGV.047	.047µF
XGV.068	.068µF
XGV.1	.1µF
XGV.22	.22µF
XGV.33	.33µF
XGV.47	.47µF
XGV.68	.68µF
XGV.1	.1µF
XGV.22	2.2µF



METALLIZED POLYPROP' MKP2 200-220VAC

MKP-2 Series (approval test - IEC384-16 / IEC68) FACO European quality, pulse application, deflection circuits in TV, electronics ballast, snubber, SCR commutating circuits, applications high current.

.1MKP2-250	0.1	15
.15MKP2-250	0.15	15
400 Vdc / 220 .01MKP2-400 .1MKP2-400 .15MKP2-400 .22MKP2-400 .33MKP2-400	0.01 0.1 0.15 0.22 0.33	15 15 15 22 22





POLYPROPYLENE - AXIAL 600VAC 2000VDC

Polypropylene 2KV high voltage caps used in TV's, etc. Ideal as tuning capacitors in horizontal output stages.



METALLIZED POLYPROP' MKPX2 275VAC

MKP-X2 Series Approvals -EN132400, VDE565-1 Made By FACO

European quality.
Mains interference suppression.
All X2 capacitors have leads
of 6mm length for PCB mount

275Vac	Value	Pitch
.01MKPX2-275	0.01	15
.022MKPX2-27	5 0.022	15
.033MKPX2-275	5 0.033	15
.047MKPX2-27	5 0.047	15
.068MKPX2-27	5 0.068	15
.1MKPX2-275	0.1	15
.22MKPX2-275	0.22	15
.33MKPX2-275	0.33	15
.47MKPX2-275	0.47	22
.68MKPX2-275	0.68	27
1MKPX2-275	1	27
2.2MKPX2-275	2.2	27







POLYESTER 63VAC 100VDC

. •		
NL.001 NL.0012 NL.0015 NL.0015 NL.0027 NL.0039 NL.0039 NL.0047 NL.0056 NL.0068 NL.0082 NL.01 NL.015 NL.022 NL.01 NL.022 NL.033 NL.047 NL.082 NL.047 NL.082 NL.33 NL.47 NL.82 NL.33 NL.47 NL.82 NL.47 NL.47 NL.82 NL.47 NL.82 NL.47 NL.82 NL.47 NL.82 NL.47 NL.82 NL.47 NL.82 NL.47 NL.82 NL.47 NL.82 NL.47 NL.82 NL.47 N	1nf 1.2nf 1.5nf 1.8nf 2.2nf 2.7nf 3.3nf 3.9nf 4.7nf 5.6nf 6.8nf 8.2nf 10nf 15nf 22nf 33nf 47nf 68nf 82nf 100nf 220nf 330nf 390nf 470nf 680nf 820nf 1µf 2.2µf 3.3µf 4.7µf 6.8µf 8.2µf 1.0µf 8.2µf 1.0µf	

POLYESTER 250VAC 630VDC



POLYESTER 600VAC 2000VDC

MEF.001 MEF.0012 MEF.0015 MEF.0015 MEF.0022 MEF.0027 MEF.0039 MEF.0039 MEF.0047 MEF.0058 MEF.0068 MEF.0082 MEF.015 MEF.015 MEF.022 MEF.033 MEF.039 MEF.047 MEF.056 MEF.068 MEF.068 MEF.082 MEF.082 MEF.047 MEF.056 MEF.082 MEF.1 MEF.1	1nf 1.2nf 1.5nf 1.5nf 2.2nf 2.7nf 3.3nf 4.7nf 5.6nf 6.8nf 10nf 15nf 22nf 33nf 56nf 68nf 15nf 10nf 15nf 10nf 15nf 10nf 15nf 33nf 39nf 10nf 15nf 10nf 33nf 33nf 33nf 33nf 33nf 33nf 33nf 3	
MEF.22	220nf	

POLYESTER MKT RANGE

Made by FACO. European
excellent for multipurpose For a Discount blocking, coupling, bypas For a Discount Please Enquire suppression, etc.

POLYESTER MKT-5 (5mm Pitch)

.0015MKT5-100	63Vdc / 40Vac 1MKT5-63 2.2MKT5-63	1μF 2.2μF
.22MKT5-100 0.22µF .33MKT5-100 0.33µF	.001MKT5-100 .0015MKT5-100 .0022MKT5-100 .0033MKT5-100 .0033MKT5-100 .0068MKT5-100 .015MKT5-100 .015MKT5-100 .022MKT5-100 .033MKT5-100 .047MKT5-100 .068MKT5-100 .15MKT5-100 .15MKT5-100 .33MKT5-100 .33MKT5-100	0.001µF 0.0015µF 0.0022µF 0.0033µF 0.0047µF 0.015µF 0.015µF 0.033µF 0.047µF 0.068µF 0.15µF 0.15µF 0.22µF 0.33µF

250 Vdc / 160 Vac	
.0068MKT5-250	0.0068µF
.01MKT5-250	0.011µF
.015MKT5-250	0.015µF
.022MKT5-250	0.022µF
.033MKT5-250	0.033µF
.047MKT5-250	0.047µF
.068MKT5-250	0.068µF
.1MKT5-250	0.1µF

400 Vdc / 200 Vac	
.001MKT5-400	0.001µF
.0015MKT5-400	0.0015µF
.0022MKT5-400	0.0022µF
.0033MKT5-400	0.0033µF
.0047MKT5-400	0.0047µF
.0068MKT5-400	0.0068µF
.01MKT5-400	0.01µF
.015MKT5-400	0.015µF
.022MKT5-400	0.022µF
.033MKT5-400	0.033µF
.047MKT5-400	0.047µF

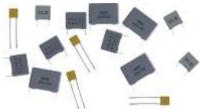
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POLYESTER MKT-10 (10mm pite			
100 Vdc / 63 Vac .33MKT10-100 .47MKT10-100 .68MKT10-100	0.33μF 0.47μF 0.68μF		
250 Vdc / 160 Vac .068MKT10-250 .1MKT10-250 .15MKT10-250 .22MKT10-250 .33MKT10-250	0.068µF 0.1µF 0.15µF 0.22µF 0.33µF		
400 Vdc / 200 Vac .015MKT10-400 .022MKT10-400 .033MKT10-400 .047MKT10-400 .068MKT10-400 .1MKT10-400	0.015µF 0.022µF 0.033µF 0.047µF 0.068µF 0.1µF		
630 Vdc / 220 Vac .0047MKT10-630 .0068MKT10-630 .01MKT10-630 .015MKT10-630 .022MKT10-630 .033MKT10-630	0.0047µF 0.0068µF 0.01µF 0.015µF 0.022µF 0.033µF		

POLYESTER MKT CONTINUED...

Code Breakdown Value (uf), Series, Pitch, Voltage. Eg: .47MKT10-100 MKT-10 series (10mm pitch) 0.47uf 100V

MKT-5 MKT-10 MKT-15 MKT-22 (5mm Pitch) (10mm Pitch) (15mm Pitch) (22.5mm Pitch)



POLYESTER MKT-15 (15mm pitch)

100 Vdc / 63 Vac	
.33MKT15-100	0.33µF
.47MKT15-100	0.47µF
1.5MKT15-100	1.5µF
2.2MKT15-100	2.21µF

250 Vdc / 160 Vac	
.15MKT15-250	0.15µF
.33MKT15-250	0.33µF
.68MKT15-250	0.68µF
1MKT15-250	1µF
1.5MKT15-250	1.5µF
2.2MKT15-250	2.2µF

400 Vdc / 200 Vac	
.047MKT15-400	0.047µF
.068MKT15-400	0.068µF
.1MKT15-400	0.1µF
.15MKT15-400	0.15µF

630 Vdc / 220 Vca	
.022MKT15-630	0.022µF
.033MKT15-630	0.033µF
.047MKT15-630	0.047µF
.068MKT15-630	0.068uF

POLYESTER MKT-22 (22.5mm)

100 Vdc / 63 Vac	
1MKT22-100	1µF
1.5MKT22-100	1.5µF
2.2MKT22-100	2.2µF
3.3MKT22-100	3.3µF

250 Vdc / 160 Vac	
.33MKT22-250	0.33µF
.47MKT22-250	0.47µF
.68MKT22-250	0.68µF
1MKT22-250	1µF
1.5MKT22-250	1.5uF

400 Vdc / 200 Vac	
.22MKT22-400	0.22µF
.33MKT22-400	0.33µF
.47MKT22-400	0.47µF

630 Vdc / 220 Vac	
.1MKT22-630	0.1µF
.15MKT22-630	0.15µF
.22MKT22-630	0.22uF





MAINS RATED (AC) CAPACITORS

AKA: MOTOR START CAPACITORS

Insulated mount / vertical mount
Non-Inductive construction
Self-Healing property
Flame-Retardant Plastic & Epoxy
High Moisture-Resistance
Temp -25°C to +85°C
Tolerance ±5%
Short term Over-V tolerant
Quality Assurance Premium production.
As used in AirConditioners, etc.

motor start, motor run, across line, and many other GP applications.





MAINS RATED 250VAC VERTICAL MOUNT

Code	WxHxDmm	Value	Voltage
2SML250	34x24x14	$2.0\mu f$	250Vac
3SML250	34x24x14	3.0µf	250Vac
4SML250	38x24x12	4.0µf	250Vac
5SML250	38x26x14	5.0µf	250Vac
6SML250	38x27x15	6.0µf	250Vac
8SML250	38x30x17	8.0µf	250Vac
10SML250	38x30x20	10µf	250Vac
20SML250	46x37x25	20µf	250Vac
25SML250	46x39x27	25µf	250Vac
30SML250	60x40x28	30µf	250Vac
40SML250	60x48x34	40µf	250Vac

MAINS RATED 350VAC VERTICAL MOUNT

2SML350	38x24x12	2.0µf	350Vac
3SML350	38x26x14	3.0µf	350Vac
4SML350	38x29x16	4.0µf	350Vac
5SML350	38x30x17	5.0µf	350Vac
6SML350	38x32x20	6.0µf	350Vac
8SML350	38x35x23	8.0µf	350Vac
10SML350	38x37x25	10µf	350Vac
20SML350	60x39x28	20µf	350Vac
30SML350	60x48x34	30µf	350Vac
40SML350	60x54x39	40µf	350Vac

MAINS RATED 400VAC VERTICAL MOUNT

2SML400	38x26x14	2.0µf	400Vac
3SML400	38x30x17	3.0uf	400Vac
4SML400	38x30x20	4.0µf	400Vac
5SML400	38x34x21	5.0µf	400Vac
6SML400	38x35x23	6.0µf	400Vac
8SML400	46x37x25	8.0µf	400Vac
10SML400	46x39x27	10µf	400Vac
20SMI 400	60x48x34	20iuf	400Vac

MAINS RATED 450VAC VERTICAL MOUNT





MAINS RATED 250VAC HORIZONTAL MOUNT

Code	WxHxDmm	Value	Voltage
2SMF250	33x20x12	$2.0\mu f$	250Vac
3SMF250	33x24x14	3.0µf	250Vac
4SMF250	38x24x13	4.0µf	250Vac
5SMF250	38x25x14	5.0µf	250Vac
6SMF250	38x28x16	6.0µf	250Vac
8SMF250	38x28x16	8.0µf	250Vac
10SMF250	38x30x20	10µf	250Vac
20SMF250	46x37x27	20µf	250Vac

MAINS RATED 350VAC HORIZONTAL MOUNT

2SMF350 3SMF350 4SMF350 5SMF350 6SMF350 8SMF350	38x24x13 38x25x14 38x28x16 38x30x20 38x30x21 38x35x22	2.0µf 3.0µf 4.0µf 5.0µf 6.0µf 8.0µf	350Vac 350Vac 350Vac 350Vac 350Vac
10SMF350	38x36x25	20µf	350Vac

MAINS RATED 400VAC HORIZONTAL MOUNT

2SMF400	38x25x14	2.0µf	400Vac
3SMF400	38x30x18	3.0µf	400Vac
4SMF400	38x30x20	4.0µf	400Vac
5SMF400	38x30x21	5.0µf	400Vac
6SMF400	38x35x23	6.0µf	400Vac
8SMF400	46x37x25	8.0µf	400Vac
10SMF400	46x39x27	10µf	400Vac

MAINS RATED 450VAC HORIZONTAL MOUNT

2SMF450	38x28x16	2.0µf	450Vac
3SMF450	38x30x21	3.0µf	450Vac
4SMF450	38x35x22	4.0µf	450Vac
5SMF450	38x36x25	5.0µf	450Vac
6SMF450	46x37x25	6.0µf	450Vac
8SMF450	46x39x27	8.0uf	450Vac

MAINS RATED 250VAC CYLINDER TYPE

Code	DxHmm	Value	Voltage
10SMR250	31x41	10µf	250Vac
20SMR250	36x53	20µf	250Vac
25SMR250	36x62	25µf	250Vac
30SMR250	36x62	30uf	250Vac
40SMR250	41x61	40 uf	250Vac
60SMR250	46x77	60uf	250Vac

MAINS RATED 350VAC CYLINDER TYPE

10SMR350	36x53	10µf	350Vac
20SMR350	36x62	20 µf	350Vac
25SMR350	41x61	25µf	350Vac
30SMR350	41x61	30µf	350Vac
40SMR350	46x77	40µf	350Vac
60SMR350	52x90	60 µf	350Vac

MAINS RATED 400VAC CYLINDER TYPE

10SMR400	36x53	10µf	400Vac
20SMR400	41x61	20µf	400Vac
25SMR400	46x77	25µf	400Vac
30SMR400	46x77	30µf	400Vac
40SMR400	52x90	40µf	400Vac
60SMR400	52x90	60uf	400Vac

MAINS RATED 450VAC CYLINDER TYPE

3.1SMR450	25x40	3.1µf	450Vac
3.2SMR450	25x40	3.2µf	450Vac
5SMR450	25x40	5.0µf	450Vac
6SMR450	30x40	6.0uf	450Vac

MAINS RATED 500VAC CYLINDER TYPE

2SMR500	25x40	2µf	500Vac
2.5SMR500	25x40	2 5uf	500Vac



AXIAL RT CAPACITORS

Axial lead terminated for horizontal mount on strip terminals, etc. Sizes not listed due to variable stock availability.

.47RT25 .47RT63 .47RT160 1RT63 2.2RT63 3.3RT16 4.7RT63 10RT63 22RT63 33RT25 33RT25 33RT25 47RT16 47RT25 47RT63 47RT160 100RT16 100RT25 220RT63 330RT25 220RT63 330RT25 470RT16 470RT25 470RT63 1000RT16 1000RT16 1000RT16 1000RT16 1000RT25 1000RT16	.47µf .47µf .47µf .47µf .3.3µf .4.7µf .10µf .22µf .33µf .47µf .47µf .47µf .47µf .47µf .47µf .47µf .47µf .47µf .47µµf .47µµf .470µf .470µf .470µf .470µf .470µf .470µf .470µf .470µf .470µf .4200µf .2200µf	25v 63v 160v 63v 63v 63v 63v 63v 25v 63v 16v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 25v 63v 63v 25v 63v 63v 63v 63v 63v 63v 63v 63v 63v 63	
2200RT16		16v	

"ATOM" AXIAL ELECTROLYTICS

Sprague Type TVA Atom Aluminum Tubular Axial Electrolytic Capacitors. Excellent sonics For Tube Guitar Amps and audiophile home Hi-Fi. These sturdy, axial lead, aluminium electrolytic capacitors are preferred by most craftsmen for authentic vintage guitar amp and hi-fi restorations. Many of the best sounding classic guitar amps by Fender, Ampeg, Magnatone, Valco and many others used Sprague Atom series electrolytics.

8ATM150	8µF	150V
8ATM450	8µF	450V
10ATM150	10µF	150V
10ATM500	10µF	500V
16ATM475	16µF	475V
20ATM500	20μF	500V
20ATM600	20μF	600V
25ATM25	25µF	25V
25ATM50	25µF	50V
30ATM500	30µF	500V
40ATM500	40µF	500V
50ATM50	50µF	50V
80ATM450	80μF	450V
100ATM100	100μF	100V
100ATM350	100µF	350V
100ATM450	100µF	450V
250ATM25	250µF	25V

AXIAL NON-POLARISED

Axial lead terminated for horizontal mount As used in speaker cross-overs, etc.

	•
1RY100 2.2RY100 3.3RY100 4.7RY100 6.8RY100 15RY100 22RY100 47RY100 68RY100 100RY100 150RY100 220RY100 330RY100 470RY100	8x17 8x19 8x19 10x19 10x19 10x19 10x24 13x27 16x34 16x34 16x34 18x40 22x50



LOW LEAKAGE CAPS - EL

.47µf

1µf

2.2µf

0.4µA Max 85°C

.47ELR63

2.2ELR63

1ELR63

Developed for use where very low leakage current is essential. eg. coupling of pre-amplifiers, etc. Leakage current remains very low even after prolonged storage. (Typical caps are 10→100µA)

63v

63v

63v

5x11

5x11

5x11

	p.		0,
3.3ELR63	3.3µf	63v	5x11
4.7ELR63	4.7µf	63v	5x11
10ELR50	10μf	50v	6x11
10ELR63	10μf	63v	8x12
22ELR35	22µf	35v	5x11
22ELR50	22µf	50v	6x11
22ELR63	22µf	63v	8x12
33ELR25	33µf	25v	5x11
33ELR35	33µf	35v	6x11
33ELR50	33µf	50v	8x12
33ELR63	33µf	63v	8x12
47ELR16	47µf	16v	5x11
47ELR25	47µf	25v	6x11
47ELR35	47µf	35v	8x12
47ELR50	47µf	50v	8x12
47ELR63	47µf	63v	10x12
100ELR10	100µf	10v	5x11
100ELR16	100µf	16v	6x11
100ELR25	100µf	25v	8x12
100ELR35	100µf	35v	8x12
100ELR50	100µf	50v	8x16
100ELR63	100µf	63v	10x16
220ELR10	220µf	10v	6x11
220ELR16	220µf	16v	8x12
220ELR25	220µf	25v	8x14
220ELR35	220µf	35v	10x16
220ELR50	220µf	50v	10x21
220ELR63	220µf	63v	13x21
330ELR10	330µf	10v	8x12
330ELR16	330µf	16v	8x12
330ELR25	330µf	25v	10x16
330ELR35	330µf	35v	10x21
330ELR50	330µf	50v	13x21
470ELR10	470µf	10v	8x12
470ELR16	470µf	16v	8x14
470ELR25	470µf	25v	10x16
470ELR35	470µf	35v	13x21
470ELR50	470µf	50v	13x26
1000ELR10	1000µf	10v	10x16
1000ELR16	1000µf	16v	10x21
1000ELR25	1000µf	25v	13x21
1000ELR35	1000µf	35v	13x26



LOW LEAKAGE CAPS

MINIATURE

0.4µA Max 85°

.47EMRL63

A very compact version of the ELR range. As used in car audio, Camcorders, etc. 47uf 63v

.47 LIVII (LOS	.47 μι	034	471
1EMRL63	1µf	63v	4x7
2.2EMRL63	2.2µf	63v	4x7
3.3EMRL63	3.3µf	63v	4x7
4.7EMRL50	4.7µf	50v	4x7
10EMRL16	10µf	16v	4x7
10EMRL25	10µf	25v	4x7
10EMRL35	10µf	35v	5x7
10EMRL50	10µf	50v	5x7
22EMRL10	22µf	10v	4x7
22EMRL16	22µf	16v	5x7
22EMRL25	22µf	25v	5x7
22EMRL35	22µf	35v	6x7
33EMRL10	33µf	10v	4x7
33EMRL16	33µf	16v	5x7
33EMRL25	33µf	25v	6x7
47EMRL10	47μf	10v	5x7
47EMRL16	47μf	16v	5x7
100EMRL10	100µf	10v	6x7
100EMRL16	100µf	16v	6x7





SS-R SERIES MINIATURE **ELECTROLYTIC CAPACITORS**

Developed for high density electronic equipment which is now becoming very popular. eg, calculators, walkmans, micro tape recorders, car stereos, videos, etc. Temp -40 → +85°C Tolerance ±20% (120Hz 25°C)

	,	,
.1SSR50	.1 µf	50V 4.2x7.5
.22SSR50	.22 µf	50v 4.2x7.5
.33SSR63	.33 µf	63v 4.2x7.5
.47SSR50	.47 µf	50v 4.2x7.5
1SSR50	1 µf	50v 4.2x7.5
2.2SSR50	2.2 µf	50v 4.2x7.5
3.3SSR50 3.3SSR63	3.3 µf 3.3 µf	50v 4.2x7.5 63v 5.2x7.5
4.7SSR25 4.7SSR50 4.7SSR63	4.7 µf 4.7 µf 4.7 µf	25v 4.2x7.5 50v 4.2x7.5 63v 6.5x7.5
10SSR16 10SSR25 10SSR35 10SSR50	10 µf 10 µf 10 µf 10 µf	16v 4.2x7.5 25v 4.2x7.5 35v 5.2x7.5 50v 5.2x7.5
22SSR16 22SSR25	22 µf 22 µf	16v 4.2x7.5 25v 5.2x7.5
33SSR16 33SSR25	33 µf 33 µf	16v 5.2x7.5 25v 6.5x7.5
47SSR10 47SSR16 47SSR25	47 μf 47 μf 47 μf	10v 5.2x7.5 16v 6.5x7.5 25v 6.5x7.5
100SSR16	100 µf	16v 7.0x7.5



TK-R SERIES ELECTROLYTIC CAPACITORS 105°

Higher quality capacitors for precision applications
105° Operating
temperature.
*LEADS:
All TKR Capacitors are the RADIAL Lead



Type unless indicated as HSW which are Snap-In PCB Types, See **HSW** Series below (Identical to TKR but PCB mount).

Sizes quoted here are as per the *Jamicon* Engineering catalogue listed specifications. Actual manufacturing sizes may vary by up to 10% for the smaller caps.

.1TKR100	.1µf	100v	5x11
.22TKR100	.22µf	100v	5x11
.33TKR63 .33TKR100	.33µf .33µf	63v 100v	5x11 5x12
.47TKR63 .47TKR100 .47TKR250 .47TKR400	.47µf .47µf .47µf .47µf	63v 100v 250v 400v	5x11 5x11 6.3x11 8x11
.68TKR63	.68µf	63v	5x11
1TKR63 1TKR100 1TKR160 1TKR250 1TKR350 1TKR400 1TKR450	1µf 1µf 1µF 1µf 1µf 1µf	100v 160v 250v	5x11 5x11 5x11 6.3x11 8x11 8x11 10x13
2.2TKR63 2.2TKR100 2.2TKR200 2.2TKR250 2.2TKR350 2.2TKR400	2.2µf 2.2µf 2.2µf 2.2µf 2.2µf 2.2µf	350v	8x11
3.3TKR25 3.3TKR63 3.3TKR100 3.3TKR200 3.3TKR250 3.3TKR400 3.3TKR450	3.3µf 3.3µf 3.3µf 3.3µf 3.3µf 3.3µf 3.3µf	100v 200v 250v 400v	5x11 5x11 5x11 6.3x11 8x11 10x13 13x21
4.7TKR63 4.7TKR100 4.7TKR160 4.7TKR250 4.7TKR350 4.7TKR400 4.7TKR450	4.7µf 4.7µf 4.7µf 4.7µf 4.7µf 4.7µf 4.7µf	63v 100v 160v 250v 350v 400v 450v	10x16
6.8TKR63 6.8TKR100 6.8TKR160 6.8TKR250 6.8TKR400	6.8µf 6.8µf 6.8µf 6.8µf 6.8µf	63v 100v 160v 250v 400v	10x13
10TKR16 10TKR25 10TKR63 10TKR100 10TKR160 10TKR200 10TKR250 10TKR350 10TKR400 10TKR450	10µf 10µf 10µf 10µf 10µf 10µf 10µf 10µf	16v 25v 63v 100v 160v 200v 250v 350v 400v 450v	5x11
22TKR16 22TKR25 22TKR35 22TKR63 22TKR100 22TKR200 22TKR250 22TKR350 22TKR400 22TKR450	22µf 22µf 22µf 22µf 22µf 22µf 22µf 22µf	16v 25v 35v 63v 100v 200v 250v 300v 400v 450v	5x11 5x11 5x11 5x11 6.3x11 10x21 10x21 13x26 13x26 16x32

33TKR35 33TKR63 33TKR100 33TKR160 33TKR200 33TKR250 33TKR350 33TKR400 33TKR450	33µf 33µf 33µf 33µf 33µf 33µf 33µf 33µf	35v 63v 100v 160v 200v 250v 350v 400v 450v	5x11 6.3x11 8x11 10x21 13x21 13x21 16x25 16x35 18x35
47TKR16 47TKR25 47TKR35 47TKR63 47TKR100 47TKR160 47TKR200 47TKR250 47TKR350 47TKR400 47HSW400 47TKR450	47µf 47µf 47µf 47µf 47µf 47µf 47µf 47µf	16v 25v 35v 63v 100v 160v 200v 250v 350v 400v 450v	5x11 5x11 5x11 6.3x11 10x13 13x21 13x21 13x26 16x35 18x35 22x25 16x42
56TKR16 56TKR63 56HSW400	56µf 56µf *56µf	16v 63v 400v	5x11 8x12 22x25
68TKR35 68TKR63 68TKR160 68TKR250 68TKR400 68TKR450	68µf 68µf 68µf 68µf 68µf 68µf	35v 63v 160v 250v 400v 450v	6.3x12 10x13 13x27 16x31 16x36 18x42
82TKR200 82TKR400	82µf 82µf	200v 400v	16x25 22x43
100TKR16 100TKR25 100TKR35 100TKR35 100TKR100 100TKR160 100TKR250 100TKR350 100TKR400 100HSW400 100TKR450	100µf 100µf 100µf 100µf 100µf 100µf 100µf *100µf 100µf	16v 25v 35v 63v 100v 160v 250v 350v 400v 450v	5x11 6.3x11 6.3x11 10x13 10x21 13x26 16x32 18x42 20x40 25x25 25x50
120TKR400	120µf	400v	22x46
150HSW200 150TKR400 150HSW450	*150µf 150µf *150µf	200v 400v 450v	22x32 25x47 25x45
220TKR16 220TKR25 220TKR35 220TKR100 220TKR100 220TKR200 220TKR250 220TKR250 220TKR400 220HSW400 220HSW450	220µf 220µf 220µf 220µf 220µf 220µf *220µf *220µf *220µf *220µf *220µf	16v 25v 35v 63v 100v 160v 200v 200v 250v 400v 450v	6.3x11 8x11 8x11 10x26 13x25 16x35 18x42 22x25 18x43 22x50 30x35 25x50
330TKR16 330TKR25 330TKR35 330TKR63 330TKR100 330TKR160 330TKR200 330HSW200 330HSW200 330HSW400	330µf 330µf 330µf 330µf 330µf 330µf *330µf *330µf	16v 25v 35v 63v 100v 160v 200v 200v 250v 400v	8x11 8x11 10x13 10x21 13x26 18x42 18x43 22x30 22x50 30x52
470TKR16 470TKR25 470TKR35 470TKR63 470TKR160 470TKR160 470TKR200 470HSW350 470HSW450	470µf 470µf 470µf 470µf 470µf 470µf *470µf *470µf	16v 25v 35v 63v 100v 160v 200v 350v 450v	8x11 10x13 10x16 13x21 16x25 22x40 26x42 35x47 35x52
560TKR25 560TKR63 560HSW200	560µf 560µf *560µf	25v 63v 200v	10x16 13x26 25x35

233	<i>rax</i>	02	97980
680TKR16 680TKR25 680TKR63 680HSW20	680µ1 680µ1 680µ1 0 *680µ1	25 63	v 10x21 v 16x33
1000TKR16 1000TKR25 1000TKR35 1000TKR63 1000TKR10 1000HSW1	1000µ 1000µ 1000µ 1000µ 001000µ	f 25 f 35 f 63 f 100	10x21 v 13x21 v 16x25 v 16x42
1200TKR35	5 1200µ	35	v 13x25
1500TKR35	5 1500µ1	35	v 16x30
2200TKR16 2200TKR25 2200TKR35 2200TKR63 2200HSW6	5 2200µ1 5 2200µ1 3 2200µ1	25 35 63	13x26 10x25 10x25 10x25
3300TKR10 3300TKR16 3300TKR25 3300TKR35 3300HSW6	3300µ 3300µ 3300µ 3300µ	f 16 f 25 f 35	v 16x25 v 16x25 v 16x35
4700TKR16 4700TKR25 4700TKR35 4700TKR63	4700µ1 4700µ1	25 35	v 16x32 v 18x35
6800TKR16 6800TKR25 6800TKR35 6800HSW6	6800µ1	f 25	v 18x35 v 22x45
10000TKR1 10000TKR2 10000HSW 10000TKR1 10000HSW	25 10000 25 *100 100 1000)µf 25 00µf 2 0µf 10	
15,000µF R PCB Snap- 15,000µf 25 Size 25x45ı 15000HSW	In mount Sv mm	ing pii	ns.
15,000µf 10 Size 50x90ı 15000RPS1	mm		
HSW SEI		LEC	TROLY1
"Snap-In" P 105°C <i>(TKF</i>	CB type ? <i>Spec'.)</i>	Electr	olytic capa
47HSW400 56HSW400 100HSW40 150HSW20 150HSW45 220HSW40 220HSW45 330HSW40 470HSW35	0 150µi 0 150µi 0 200µi 0 220µi 0 220µi 0 330µi 0 330µi	f 400v f 400v f 200v f 450v f 200v f 450v f 200v f 400v	22x25 25x25 22x32 25x45 22x25 30x35 25x50 22x30 30x52

LYTIC

capacitors

47HSW400 56HSW400		400v 400v	22x25 22x25
100HSW400	100µf		25x25
150HSW200	150µf		22x32
150HSW450	150µf		25x45
220HSW200 220HSW400	200µf 220µf		22x25 30x35
220HSW450	220µf		25x50
330HSW200	330µf	200v	22x30
330HSW400	330µf		30x52
470HSW350 470HSW450	470µf 470µf	350V 450v	35x47 35x52
560HSW200	560µf		25x35
680HSW200	680µf		30x30
1000HSW100			26x45
2200HSW63 3 3300HSW63 3			25x30 25x51
6800HSW63			30x52
10000HSW25			
10000HSW10			0v 35x72
15000HSW25	1500	JUµf 25	ov 25X45





LOW IMPEDANCE CAPS

SWITCH-MODE

105°C 4µA Leakage
Ideal for use in switching power supplies and other high frequency applications.
Low impedance and long life.



1EXR63	1µf	63v	5x11
1EXR100	1µf	100v	5x11
2.2EXR63	2.2µf	63v	5x11
2.2EXR100	2.2µf	100v	5x11
3.3EXR63	3.3µf	63v	5x11
3.3EXR100	3.3µf	100v	5x11
4.7EXR63	4.7μf	63v	5x11
4.7EXR100	4.7μf	100v	5x11
6.8EXR63	6.8µf	63v	5x11
6.8EXR100	6.8µf	100v	5x11
10EXR25	10µf	25v	5x11
10EXR35	10µf	35v	5x11
10EXR63	10µf	63v	5x11
10EXR100	10µf	100v	7x11
22EXR16	22µf	16v	5x11
22EXR25	22µf	25v	5x11
22EXR35	22µf	35v	5x11
22EXR63	22µf	63v	6x11
22EXR100	22µf	100v	8x12
33EXR16	33µf	16v	5x11
33EXR25	33µf	25v	5x11
33EXR35	33µf	35v	6x11
33EXR50	33µf	50v	6x11
33EXR63	33µf	63v	6x11
33EXR100	33µf	100v	10x20
47EXR16	47µf	16v	5x11
47EXR25	47µf	25v	5x11
47EXR35	47µf	35v	6x11
47EXR50	47µf	50v	6x11
47EXR63	47µf	63v	8x12
47EXR100	47µf	100v	10x16
68EXR16	68µf	16v	6x11
68EXR25	68µf	25v	6x11
68EXR35	68µf	35v	6x11
68EXR50	68µf	50v	8x12
68EXR63	68µf	63v	10x14
68EXR100	68µf	100v	10x20
100EXR10 100EXR16 100EXR25 100EXR35 100EXR50 100EXR63 100EXR100	100µf 100µf 100µf 100µf 100µf 100µf	10v 16v 25v 35v 50v 63v 100v	5x11 6x11 6x11 8x12 10x14 10x16 13x22
150EXR10 150EXR16 150EXR25 150EXR35 150EXR50 150EXR63 150EXR100	150µf 150µf 150µf 150µf 150µf 150µf	10v 16v 25v 35v 50v 63v 100v	6x11 8x12 8x12 10x12 10x16 10x20 13x25





220EXR10	220µf	10v	6x11
220EXR16	220µf	16v	8x11
220EXR25	220µf	25v	8x12
220EXR35	220µf	35v	10x16
220EXR50	220µf	50v	10x20
220EXR63	220µf	63v	13x22
220EXR100	220µf	100v	16x27
330EXR10 330EXR16 330EXR25 330EXR35 330EXR50 330EXR63 330EXR100	330µf 330µf 330µf 330µf 330µf 330µf	10v 16v 25v 35v 50v 63v 100v	8x12 8x12 8x14 10x20 10x20 13x22 16x26
470EXR10	470µf	10v	8x11
470EXR16	470µf	16v	10x13
470EXR25	470µf	25v	10x16
470EXR35	470µf	35v	10x20
470EXR63	470µf	63v	13x25
470EXR100	470µf	100v	18x32
680EXR10	680µf	10v	8x14
680EXR16	680µf	16v	10x16
680EXR25	680µf	25v	10x20
680EXR35	680µf	35v	13x22
680EXR50	680µf	50v	13x26
680EXR63	680µf	63v	16x27
680EXR100	680µf	100v	18x40
820EXR16	820µf	16v	10x16
1000EXR10 1000EXR16 1000EXR25 1000EXR35 1000EXR50 1000EXR63	1000µf 1000µf 1000µf 1000µf 1000µf	10v 16v 25v 35v 50v 63v	10x13 10x20 13x22 13x25 16x27 16x32
1200EXR35	1500µf	35v	16x22
1500EXR10 1500EXR16 1500EXR25 1500EXR35 1500EXR50 1500EXR63	1500µf 1500µf 1500µf 1500µf 1500µf	10v 16v 25v 35v 50v 63v	10x20 13x21 13x26 16x27 16x30 18x33
2200EXR10	2200µf	10v	10x20
2200EXR16	2200µf	16v	13x22
2200EXR25	2200µf	25v	16x25
2200EXR35	2200µf	35v	16x32
2200EXR50	2200µf	50v	18x36
3300EXR10	3300µf	10v	13x21
3300EXR16	3300µf	16v	16x27
3300EXR25	3300µf	25v	16x27
3300EXR35	3300µf	35v	18x36
4700EXR10	4700μf	10v	16x25
4700EXR16	4700μf	16v	16x32
4700EXR25	4700μf	25v	18x36

TX SERIES ELECTROLYTIC RADIAL HIGH-RIPPLE

HIGH RIPPLE CURRENT - LOW E.S.R. -LONG LIFE

As used in Switch-Mode power supplies. Ballast capacitors, etc. 105°C



1TX450	1µF	450	10x13
2.2TX250	2.2µF	250	8x11
2.2TX400	2.2µF	400	10x13
2.2TX450	2.2µF	450	10x16
3.3TX200	2.2µF	200	8x11
3.3TX350	3.3µF	350	10x13
3.3TX400	3.3µF	400	10x16
3.3TX450	3.3µF	450	10x21
4.7TX250	4.7µF	250	10x16
4.7TX400	4.7µF	400	10x21
4.7TX450	4.7µF	450	13x21
10TX400	10μF	400	10x26
10TX450	10μF	450	13x21
22TX200	22µF	200	10x21
22TX350	22µF	350	13x21
22TX400	22µF	400	13x26
22TX450	22µF	450	16x25
33TX350	33µF	350	13x26
33TX400	33µF	400	13x26
33TX450	33µF	450	16x32
47TX250	47μF	250	13x26
47TX400	47μF	400	16x25
47TX450	47μF	450	18x32
68TX400	68µF	400	16x32
68TX450	68µF	450	18x35
100TX250	100μF	250	16x32
100TX400	100μF	400	18x35
150TX200	150μF	200	16x32
150TX250	150μF	250	18x32
220TX160	220µF	160	16x32
220TX200	220µF	200	18x35
220TX250	220µF	250	18x40





WL-R SERIES MINIATURE LOW-IMPEDANCE **ELECTROLYTIC CAPACITORS**

Jamicon WL Series Radial. Developed for modern switch mode power supply applications. Very rugged design with lower impedance at high frequency and high ripple current, packaged in a small

Not suitable for audio. Temp -55 → +105°C





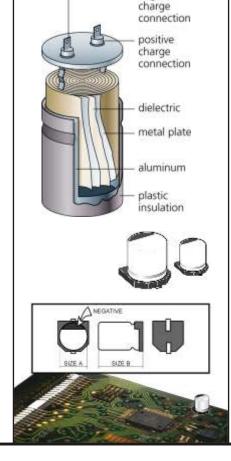
Tolerance ±20% (120Hz 25°C)

Tolerance ±2	0% (12	20Hz 25	°C)
.47WLR100	.47 μ	f 100v	5x12
1WLR100	1 μ	f 100v	5x12
2.2WLR100	2.2 μ	f 100v	5x12
3.3WLR100	3.3 μ	f 100v	5x12
4.7WLR63 4.7WLR100	4.7 μ 4.7 μ	f 63v f 100v	5x12 6.5x12
10WLR35 10WLR63 10WLR100	10 μ 10 μ 10 μ	f 63v	5x12 6.5x12 8x12
22WLR35 22WLR63 22WLR100	22 µ 22 µ 22 µ	f 35v f 63v f 100v	5x12 6.5x12 10x13
33WLR63	33 μ	f 63v	6.5x12
47WLR35 47WLR63 47WLR100	47 μ 47 μ 47 μ	f 35v f 63v f 100v	5x12 8x12 10x13
100WLR16 100WLR25 100WLR35 100WLR63 100WLR100	100 µ 100 µ 100 µ 100 µ 100 µ	f 25v f 35v f 63v	5x12 6.5x12 8x12 10x13 13x21
220WLR16 220WLR25 220WLR35 220WLR63	220 µ 220 µ 220 µ 220 µ	f 25v f 35v	6.5x12 8x12 8x16 10x20
330WLR16 330WLR25 330WLR35 330WLR63	330 µ 330 µ 330 µ 330 µ	f 35v	8x12 10x13 10x16 13x26
470WLR16 470WLR25 470WLR35 470WLR63	470 μ 470 μ 470 μ 470 μ	f 25v f 35v	10x13 10x16 10x21 13x21
680WLR16 680WLR25 680WLR35 680WLR63	680 µ 680 µ 680 µ 680 µ	f 25v f 35v	10x16 10x21 16x16 13x31
1000WLR16 1000WLR25 1000WLR35 1000WLR63	1000 μ 1000 μ 1000 μ 1000 μ	f 16v f 25v f 35v f 63v	10x21 10x26 13x26 16x25
1200WLR35	1200 µ	f 35v	16x22
1500WLR35			16x25
2200WLR162 2200WLR252 2200WLR352 2200WLR632	2200 µ 2200 µ 2200 µ 2200 µ	f 16v f 25v f 35v f 63v	13x26 16x25 16x32 18x42
4=0014# 540	4700		40.00

ELNA CERAFINE ELECTROLYTIC 100V 85°C

HIGH-END SUPER-FAST AUDIO Made in Japan. Contains super fine ceramic particles which improve the ceramic particles which improve the discharging speed. Ideal for upgrade of High-End valve, transistor preamps, amplifiers, filters and power supplies. Beautifuly suited for DC coupling. Due to their mechanical build they are less sensitive to externally generated noise resulting in even lower distortion. These capacitors are as good as the Black Gates series but at a lower price. A premium quality product exclusive quality product exclusive.





negative

ELECTROLYTIC SMD

SURFACE MOUNT - Compact &

Ultracompact Especially suitable for dual-surface, high density boards. Will substitute most surface mount capacitor replacement. Anti-solvent materials. Tin can, plastic base, flat legs. Tolerance ±20%. -40 to +80°C

Code = Value-Range-Voltage



.1MXM50	0.1µF	50V	4X5
.22MXM50	0.22µF	50V	4X5
.33MXM50	0.33µF	50V	4X5
.47MXM50	0.47µF	50V	3X5
1MXM50	1µF	50V	3X5
1UWX50	1µF	50V	4x5
2.2MXM35	2.2µF	35V	3X5
2.2MXM50	2.2µF	50V	4X5
3.3MXM35	3.3µF	35V	3X5
3.3MXM50	3.3µF	50V	4X5
4.7MXM25	4.7µF	25V	3X5
4.7MXM35	4.7µF	35V	4X5
4.7MXM35	4.7µF	50V	5X5
10UWX16 10MXM16 10MXM25 10MXM35 10MXM50 22MXM4 22UWX6.3 22MXM6.3 22MXM35 22MXM5 22MXM5 33MXM4 33MXM4 33MXM25 33MXM50 47MXM4 47MXM6.3 47MXM16 47MXM16 47MXM16 47MXM16	10µF 10µF 10µF 10µF 22µF 22µF 22µF 22µF 33µF 33µF 33µF 33	16V 16V 25V 35V 50V 4V 6.3V 16V 35V 50V 4V 10V 25V 35V 4V 6.3V 4V 6.3V 50V 4V 6.3V	3X5 4X5 4x5 6.3X5 3X5 5X5 6.3X5 5X5 6.3X5 8X6 6.3X5 8X10 4X5 5X5 6.3X5 8X10 4X5 5X5
100MXM4	100µF	4V	5X5
100MXM6.3	100µF	6.3V	6.3X5
100MXM16	100µF	16V	8X6
100MXM25	100µF	25V	8X10
100MXM35	100µF	35V	6X8
220MXM4 220MXM10 220MXM25 330MXM6.3 470MXM6.3 470MXM16 680MXM6.3	220µF 220µF 220µF 330µF 470µF 470µF 680µF	4V 10V 25V 6.3V 6.3V 10V 6.3V	6.3X5 6X8 10X10 8X6 8X10 10X10

ELECTROLYTIC SMD HIGH TEMP'

SURFACE MOUNT - 105°C Similar to MXM Series Except: Temperature . . . 105°C Tolerance



.1HB50 .22HB50 .47HB50 .47HB50 2.2HB50 4.7HB55 4.7HB50 6.8HB25 4.7HB50 6.8HB25 10UWT16 10HB35 22HB6.3 22HB16 22HB16 33HB10	0.1µF 0.22µF 0.47µF 1µF 2.2µF 4.7µF 4.7µF 6.8µF 10µF 10µF 10µF 22µF 22µF 22µF 33µF	50V 50V 50V 50V 50V 25V 50V 25V 16V 16V 35V 6.3V 16V	4X5 4X5 4X5 4X6 5X6 5X6 4X6 3X5 5X6 4X6 5X6 6X6 5X6
22HB25	22µF	25V	6X6
47HB6.3 47HB16	47µF 47µF	6.3V 16V	5X6 6X6
100HB6.3	100uF	6.3V	6X6

4700WLR164700 μf 4700WLR254700 μf

16x32 18x35



METAL CAN CAPACITOR

LCR Brand made in UK PCB Mount pins (4X). PCM 401 CJ 385 Value 400µF Volt 385VDC Size 75x35mmØ Code 400C385



LARGE VALUE HIFI CAPACITOR 15,000µF

As used in audio amplifiers etc. Includes Bracket base 15,000µF 100 Volts 105°C 50 x 90mmØ plus terminals Code 15000RB100



METAL CAN DUAL CAPACITOR

LCR Brand made in UK PCB Mount pins (3X). FAC/SD28D

Value 50μF+50μF Volt 250 V Size 40X30mmØ Code 100C250



GOLD CAPS

BACKUP CAPACITORS

VCRs, Tuners, etc.

1.0F 5.5V Code

de GC1



0.22F 5.5V Code GC.22

METAL CAN DUAL CAPACITOR

LCR Brand made in UK PCB Mount pins (3X). FAC/SD29D

Value 225μF+25μF Volt 385 V Size 40x40mmØ Code 250C385



50V NON POLARISED NP (μF)

Suit applications in

TV. Audio, Speakers, etc. µF Code Ċode .47NP50 22NP50 1NP50 33NP50 2.2NP50 47NP50 3.3NP50 100NP50 220NP50 4.7NP50 6.8NP50 330NP50 10NP50 470NP50



F&T DUAL VALUE RADIAL CAPACITOR

F&T direct replacement type caps, dual value electrolytic aluminium Premium quality made in Germany.

Value 32μF+32μF Volt 500V Size 52x35Ø Code FT32X32



100V NON POLARISED NP (µF)

Suit TV, Audio, etc. µF

Code .47NP100 22NP100 1NP100 33NP100 2.2NP100 47NP100 3.3NP100 100NP100 4.7NP100 10NP100



F&T DUAL VALUE RADIAL CAPACITOR

F&T direct replacement type caps, dual value electrolytic aluminium Premium quality made in Germany.

Value 50μF+50μF Volt 500V Size 52x35Ø Code FT50X50



100V NON POLARISED AXIAL STYLE (µF)

As used in Speaker X-Overs, etc. µF

1RY100 8x17 .2RY100 8x17 3.3RY100 8x19 4.7RY100 8x19 6.8RY100 10x19 10RY100 10x19 15RY100 10x19 22RY100 10x24 33RY100 13x27



F&T DUAL VALUE RADIAL CAPACITOR

F&T direct replacement type caps, dual value electrolytic aluminium Premium quality made in Germany.

Value 100μF+100μF Volt 500V Size 76x35Ø Code FT100X100



1 FARAD 20VDC CAR AUDIO CAPACITOR

Black in colour with gold plated screw terminals. Includes clear mounting bracket 1,000,000µF

Size 210x75Ømm Code AP806



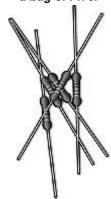


RF CHOKES / INDUCTORS

Packaged 5 pieces per bag with header for easy identification.

Code	Value	per bag
RFC1UH	1 microhenry	
RFC1.5UH	1.5 microhenry	
RFC2.2UH	2.2 microhenry	
RFC3.3UH	3.3 microhenry	
RFC4.7UH	4.7 microhenry	á
RFC6.8UH	6.8 microhenry	
RFC8.2UH	8.2 microhenry	
RFC10UH	10 microhenry	III
RFC15UH	15 microhenry	
RFC22UH	22 microhenry	- 3
RFC33UH	33 microhenry	
RFC47UH	47 microhenry	
RFC82UH	82 microhenry	
RFC100UH	100 microhenry	
RFC150UH	150 microhenry	
RFC220UH	220 microhenry	
RFC330UH	330 microhenry	
RFC470UH	470 microhenry	
RFC680UH	680 microhenry	83
RFC1MH	1 millihenry	//
RFC1.5MH	1.5 millihenry	*
RFC2.5MH	2.5 millihenry	
RFC5MH	5 millihenry	
RFC10MH	10 millihenry	

Order One to Receive a bag of Five!



COMPACT 6X8mm INDUCTORS

Low profile with protective cover. 10% Tol. Q=60 to 80 minimum.

10 /0 101. 0	00 10 00 111111	
Code	mH	mAma
TK8101	0.10	200
TK8121	0.12	200
TK8151	0.15	200
TK8181	0.18	200
TK8221	0.22	150
TK8271	0.27	150
TK8331	0.33	150
TK8391	0.39	100
TK8471	0.47	100
TK8561	0.56	100
TK8681	0.68	100
TK8821	0.82	50
TK8102	1.00	50
TK8122	1.20	50
TK8152	1.50	50
TK8182	1.80	50
TK8222	2.20	50
TK8272	2.70	50
TK8332	3.30	40
TK8392	3.90	40
TK8472	4.70	40
TK8562	5.60	30
TK8682	6.80	30
TK8882	8.20	30
TK8103	10.0	20
TK8123	12.0	20
TK8153	15.0	20



ENCASED 10x14mm INDUCTORS

Choke coil for noise filtering, etc.

CHOKE COIL IOL I	ioise iliterii	ig, etc.
10% Tol. Q=10	0	-
Code	mΗ	mAmax
TK10183	18.0	100
TK10223	22.0	100
TK10273	27.0	100
TK10333	33.0	100
TK10363	36.0	100
TK10393	39.0	100
TK10473	47.0	100
TK10563	56.0	100
TK10683	68.0	100
TK10823	82.0	100
TK10104	100	100
TK10124	120	100



SOLEN CROSSOVER INDUCTORS

HEX-WINDING OFC AIR-CORE

Solen have developed a special Hexagon type layered winding system, "Perfect-Lay", for increasing the inductance to wire length ratio so as to reduce the DC-Resistance to a minimum. High grade, low-loss, pure 99.99% copper wire is used. Very low Magnetostriction distortion. Induction value remains constant reguardless of voltage and current variation. Low DCR. Low skin effect losses. Low proximity effect. Low self capacitance. A premium grade component developped for the purest audiophile, without compromise.

Tolorence (mH) is ±1% DCR (Ohms) ±5% Dimensions (mm) ±10% 1.63mm O/D **14 ÁWG**

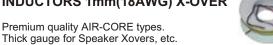


Value	DCR	Size	Solen#
.16mH	$.07\Omega$	14x29x57mm	S14.16
.18mH	Ω 80.	14x29x57mm	S14.18
.20mH	Ω 80.	14x29x57mm	S14.20
.22mH	$.09\Omega$	14x29x57mm	S14.22
.27mH	$.10\Omega$	14x29x57mm	S14.27
.33mH	$.11\Omega$	16x32x64mm	S14.33
.39mH	$.12\Omega$	16x32x64mm	S14.39
.47mH	$.13\Omega$	16x32x64mm	S14.47
.51mH	$.14\Omega$	16x32x64mm	S14.51
.56mH	$.15\Omega$	16x32x64mm	S14.56
.68mH	$.17\Omega$	19x38x76mm	S14.68
.82mH	$.19\Omega$	19x38x76mm	S14.82
1.0mH	$.21\Omega$	19x38x76mm	S141.0
			S141.2
			S141.5
			S141.8
2.2mH	$.33\Omega$	22x45x89mm	S142.2
2.7mH	$.39\Omega$	22x45x89mm	S142.7
3.0mH	$.42\Omega$	22x45x89mm	S143.0
3.3mH	$.45\Omega$	25x51x102mm	S143.3
3.9mH	$.49\Omega$	25x51x102mm	S143.9
4.7mH	$.56\Omega$	25x51x102mm	S144.7
5.1mH	$.59\Omega$	25x51x102mm	S145.1
5.6mH	$.63\Omega$	25x51x102mm	S145.6
6.8mH	$.71\Omega$	32x64x127mm	S146.8
8.2mH	$.79\Omega$	32x64x127mm	S148.2
10mH	$.87\Omega$	32x64x127mm	S1410
	.16mH .18mH .20mH .22mH .33mH .39mH .47mH .51mH .56mH .82mH 1.0mH 1.2mH 1.5mH 1.5mH 1.5mH 1.5mH 1.5mH 1.5mH 2.7mH 3.0mH 3.3mH 3.9mH 4.7mH 5.6mH 6.8mH 5.1mH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$.16mH .07Ω 14x29x57mm .18mH .08Ω 14x29x57mm .20mH .08Ω 14x29x57mm .22mH .09Ω 14x29x57mm .27mH .10Ω 14x29x57mm .33mH .11Ω 16x32x64mm .39mH .12Ω 16x32x64mm .47mH .13Ω 16x32x64mm .51mH .14Ω 16x32x64mm .56mH .15Ω 16x32x64mm .58mH .17Ω 19x38x76mm .82mH .19Ω 19x38x76mm 1.0mH .21Ω 19x38x76mm 1.5mH .28Ω 19x38x76mm 1.5mH .30Ω 22x45x89mm 2.7mH .39Ω 22x45x89mm 3.0mH .42Ω 22x45x89mm 3.9mH .49Ω 25x51x102mm 4.7mH .56Ω 25x51x102mm 5.6mH .63Ω 25x51x102mm 5.6mH .63Ω 25x51x102mm 5.6mH .63Ω 25x51x102mm 5.8mH .71Ω 32x64x127mm 8.2mH

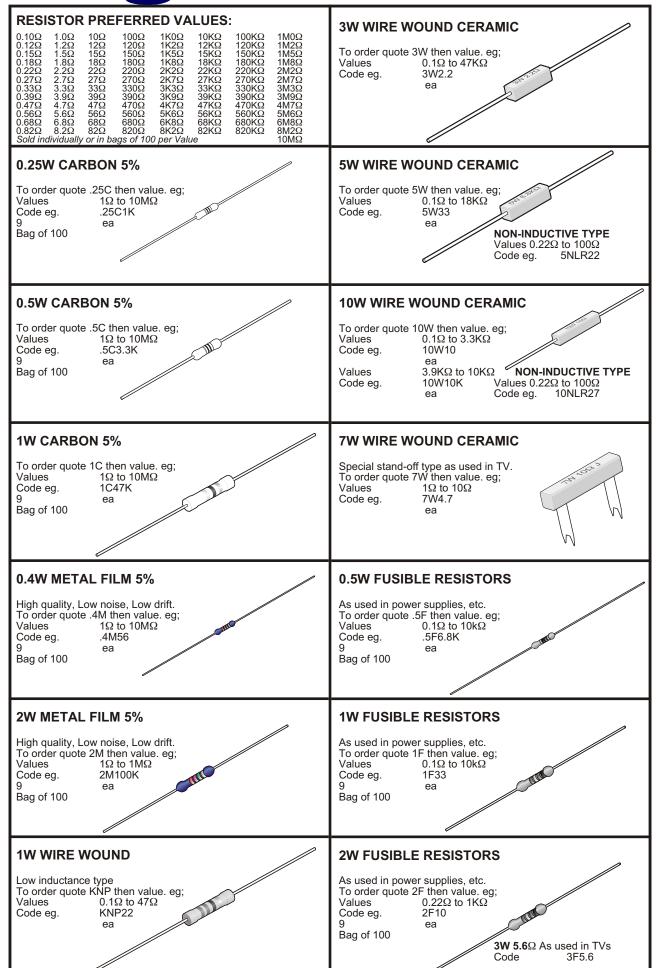
www.wescomponents.com/capacitor/solen/S14.htm

Maximum DCR for Series inductors for 8Ω load is 0.6Ω Total. Maximum DCR for Parallel inductors for 8Ω load is 1.2 Ω Total.

INDUCTORS 1mm(18AWG) X-OVER



	go ioi opou		
Code	Value		Size mm
XLA0.05	0.05mH	0.1Ω	50x20Ø
XLA0.1	0.10mH	0.1Ω	50x20Ø
XLA0.12	0.12mH	0.1Ω	50x20Ø
XLA0.15	0.15mH	0.2Ω	50x20Ø
XLA0.22	0.22mH	0.2Ω	50x20Ø
XLA0.33	0.33mH	0.3Ω	50x20Ø
XLA0.39	0.39mH	0.3Ω	50x20Ø
XLA0.47	0.47mH	0.3Ω	50x20Ø
XLA0.56	0.56mH	0.4Ω	50x20Ø
XLA0.68	0.68mH	0.5Ω	50x20Ø
XLA0.82	0.82mH	0.5Ω	50x30Ø
XLA1	1.0mH	0.6Ω	50x30Ø
XLA1.2	1.2mH	0.7Ω	50x30Ø
XLA1.5	1.5mH	Ω 8.0	50x30Ø
XLA1.8	1.8mH	Ω 8.0	50x30Ø
XLA2.2	2.2mH	Ω 8.0	70x35Ø
XLA2.7	2.7mH	0.9Ω	70x35Ø
XLA3	3.0mH	0.9Ω	70x35Ø
XLA3.3	3.3mH	1.2Ω	70x35Ø
XLA3.9	3.9mH	1.4Ω	70x35Ø
XLA4.7	4.7mH	1.4Ω	70x35Ø
XLA5.6	5.6mH	1.4Ω	70x35Ø
XLA6.8	6.8mH	1.5Ω	70x35Ø
XLA8.2	8.2mH	1.8Ω	70x35Ø
XLA10	10 mH	2.0Ω	90x45Ø





CARBON POTENTIOMETERS 1/4"

LINEAR VRC1KB VRC5KB VRC10KB VRC25KB VRC50KB VRC100KB VRC500KB VRC500KB VRC1MB LOGARYTHMIC	LIN LIN LIN LIN LIN LIN LIN	1ΚΩ 5ΚΩ 10ΚΩ 25ΚΩ 50ΚΩ 100ΚΩ 500ΚΩ 1ΜΩ	6.3mm	
VRC1KA VRC5KA VRC10KA VRC25KA VRC50KA VRC100KA VRC500KA VRC1MA	LOG LOG LOG LOG LOG LOG LOG	1ΚΩ 5ΚΩ 10ΚΩ 25ΚΩ 50ΚΩ 100ΚΩ 500ΚΩ 1ΜΩ		

MINIATURE POTENTIOMETER

 Value
 Type

 V17N-5K
 5K
 Norm.

 V17S-5K
 5K
 Switched

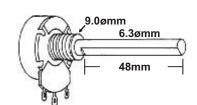
 V17S-50K
 50K
 Switched

Volume control for little





3W WIRE WOUND LINEAR 500VDC

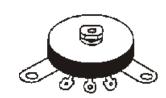


MINIATURE POTENTIOMETER

Volume control for little portable radios, etc. *The switch component can easily be removed.

Code	Value	Type
V16N-10K	10K	Norm.
V16S-10K	10K	Switched
V16N-50K	50K	Norm. NLA
V16S-50K	50K	Switched*



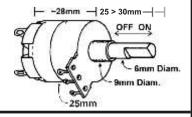


SWITCHED POTENTIOMETERS

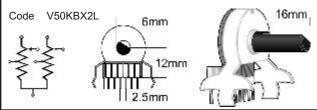
TV Volume control with *Pull-Out* Two pole Single throw 240VAC switch.

Value
5K
10K
20K
50K
100K





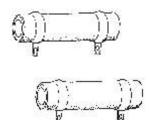
VOLUME POT WITH LOUDNESS TAP



HIGH POWER DUMMY LOADS

Non-Inductive load for testing amps, Power supplies, etc.

Code 50W4 50W8 100W4	4Ω	50 50 10	owe)W)W)OW
100W8	Ω 8	10	00W

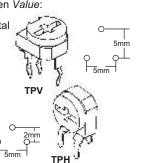


TRIMMING POTENTIOMETERS

These miniature pots are of the highest quality and conform to the 5mm grid industry standard. Available Horizontal or Vertical. 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1M Ω .

To order please quote Style then Value:
TPV+Value = TrimPot Vertical
TPH+Value = TrimPot Horizontal
Example:
Code TPV200





NON-INDUCTIVE RESISTORS Wire wound Ceramic. HQ.

 $0.22\Omega \rightarrow 100\Omega$ in Popular Values. **5W** x = Value in Ω Code 5NLRx**10W** x = Value in Ω

Code 10NLRx

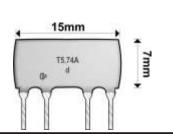
Values= .22 .33 .39 .47 .51 .56 .68 .82 1.0 1.5 1.8 2.2 2.7 3.3 4.7 6.8 8.2 1.0 1.5 1.8 2.2 2.7 3.3 3.9 4.7 5.6 68 82 1.00

ELECTRONIC SERVICES A/Asia 138 LIVERPOOL RD ASHFIELD 2131 PH 02 97989233 FAX 02 97980017



CERAMIC FILTER AV

Freq. 5.74MHz BW-3dB ±50KHz BW-20dB ±350KHz IL -9dB I/O 600Ω Code SFT5.74MA



CERAMIC FILTERS

455KHz, 10KHz BW Resin moulded

Code CF455

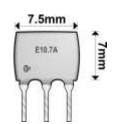




CERAMIC FILTER FM-IF

Freq. 10.7MHz
BW-3dB ±280KHz
BW-20dB ±650KHz
II -6dB

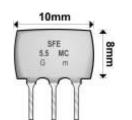
 $\begin{array}{ll} \text{I/O} & 330\Omega \\ \text{Code} & \text{SFE10.7MA5A} \end{array}$



CERAMIC FILTER AV

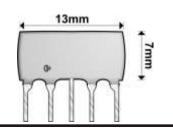
Freq. 5.5MHz BW-3dB ±50KHz BW-20dB ±400KHz

 $\begin{array}{ll} \text{IL} & \text{-8dB} \\ \text{I/O} & 600\Omega \\ \text{Code} & \text{SFE5.5MC} \end{array}$



SAW FILTER AV

For TV VIF/VCR IL -25dB
Freq. 38.9MHz
Code SAF38.9MZ

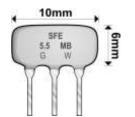


CERAMIC FILTER AV

Low Profile Freq. 5.5MHz BW-3dB

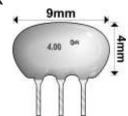
BW-3dB ±50KHz BW-20dB ±400KHz

 $\begin{array}{lll} \text{IL} & -8\text{dB} \\ \text{I/O} & 600\Omega \\ \text{Code} & \text{SFE5.5MBF} \end{array}$



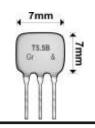
CERAMIC RESONATOR

With built-in load capacitance. Freq. 4.00MHz Code CST4.00MGW



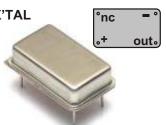
CERAMIC FILTER AV

Notch/Band stop. Suit TV & VCRs. B/W 70KHz(-3dB) Trap 5.5MHz Code TPS5.5MB



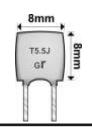
4.433MHZ COLOUR X'TAL

Crystal Oscilator block. TTL CMOS Compatible As used in PAL Colour. 5V. 4.433MHz. 21x13x5mm Code QXO-1100



CERAMIC TRAP AV

 $\begin{array}{lll} \text{Freq.} & 5.5 \text{MHz} \\ \text{IL} & -35 \text{dB} \\ \text{I/O} & 600 \Omega \\ \text{Code} & \text{TPS5.5MJ} \end{array}$



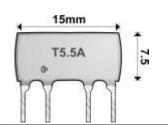
SHARP CRYSTAL

RCRSB0090GEZZ As used in SHARP TV and VCRs. Code CR0090



CERAMIC FILTER

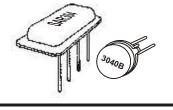
 $\begin{array}{ll} \mbox{High selectivity.} \\ \mbox{Suit TV/VCRs.} \\ \mbox{Freq.} & 5.5\mbox{MHz} \\ \mbox{B/W} & 50\mbox{KHz(-3dB)} \\ \mbox{I/O} & 600\Omega \\ \mbox{Code} & \mbox{SFT5.5MA} \end{array}$



SAW RESONATOR 304MHz

Suit UHF Remote Controls. Freq. 304MHz RECTANGULAR Code SAR304

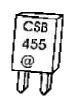
MINIATURE ROUND Code SAR3040B





CERAMIC RESONATORS

Code F	requency
CSB307D	307KHz
CSB393	393KHz
CSB400	400KHz
CSB420J	420KHz
CSB429	429KHz
CSB430	430KHz
CSB440	440KHz
CSB450E	450KHz
CSB455E	455KHz
CSB480J	480KHz
CSB485	485KHz
CSB493	493KHz
CSB500	500KHz



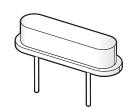
CERAMIC RESONATORS

CSA3.52 CSA3.58 CSA4.00	Frequency 3.52MHz 3.58MHz 4.00MHz
CSA6.00	6.00MHz
CSA7.20	7.20MHZ
CSA10.00	10.00MHz



CRYSTALS LOW PROFILE

Code 4.500000MHz CR4.500LP 7.20000MHz CR7.200LP 8.867238MHz CR8.867LP



CRYSTALS STEEL CAP

Code 2000Hz (2KHz) CR2000

3.562MHz CR3.562

3.579545MHz CR3.579

4.0000MHz CR4.000

4.4194MHz CR4.4194

4.43361875MHz CR4.433

4.5000MHz CR4.500

6.0000MHz CR6.000

7.20000MHz CR7.200

8.00000MHz CR8.000

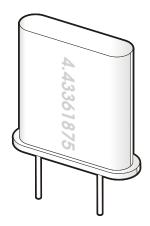
8.867238MHz CR8.867

10.0000MHz CR10.00

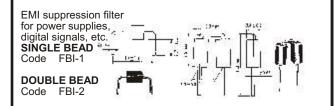
18.432MHz CR18.432

18.832MHz CR18.832

27.000MHz CR27.000



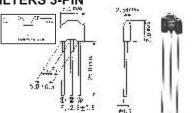
FERRITE BEAD INDUCTORS



FERRITE & CAP FILTERS 3-PIN

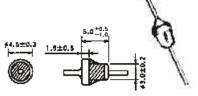
EMI suppression filter. High noise rejection. 270pF 100V Code EMIF270

10,000pF 100V Code EMIF103



FEED THROUGH CAPS 18-AWG

EMI suppression. Feed-through type for VHF/UHF noise filter. SOLDER MOUNT Value 1nF 50V Code FT318-1000



ELECTROMAGNETIC INDUCTION FIELD

These devices are highly permeable ferrite cores, split inside a plastic case that snaps closed over power and data cables. Suppress noise from / to many sources. eg. Computer monitors, Power cords, Switch mode supplies, etc... Choose by cable diameter.

Code EMIF1000	Cable 5mm	Size 15x23
EMIF1350 EMIF1651 EMIF1652	6.5mm 7.5mm 8.5mm	17x32 20x32 20x32
EIVIIF 1052	S I	20x32

GAS DC SURGE ARRESTER

Gas arresters offer protection against voltage transients on DC such as lightning, inductive switching, electrostatic, etc., in telephone and telecommunication equipment. Under normal conditions it's effectively a capacitor. When the impulse breakdown voltage is exceeded it goes conductive. The devices clamp to around 10 to 20V when arcing so they are NOT SUITABLE for 240VAC applications. Austel certified.

3 LEAD

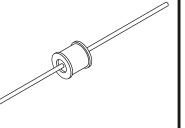
Nom. 250V L-G Min. 200V L-G Max. 300V L-G 600V L-L

Break 600V(100V/uS)L-G down 900V(1KV/uS) L-G 1200(100V/uS)L-L

Code PMT310

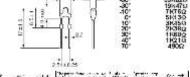
2 LEAD Nom. 600V Min. 510V Max 950V

Break 950V(100V/uS) down 1200V(1KV/uS) Code GSA260



THERMISTOR - TEMPERATURE SENSOR

PCB Mount (2.54mm) Thermal device. $2.0 \text{K}\Omega$ at 25°C ±0.3°C Precision. Code 202AT-2



www.wescomponents.com/datasheets/

THERMISTOR - TEMPERATURE SENSOR

WEATHER RESISTANT "AT" Thermal resistor 60cm lead. Encased head. ±0.3°C Accurate. 2KΩ at 25°C Code 202AT-1

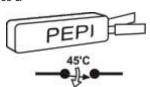


www.wescomponents.com/datasheets/

PEPI THERMAL SWITCH - SELF RESET

Commonly used in power supplies & battery packs. With solder tags. Size 20x5x7mm Self-Resets Temp 45°

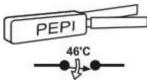
Current 6A Voltage 125V Code TSW45



PEPI THERMAL SWITCH - MINI N/C

Similar to TSW45 But miniature type. Self resetting thermal trigger.

Size 15x3x5mm Temp 46° Current 2.6A Voltage 120V



PEPI THERMAL SWITCH - MINI N/O

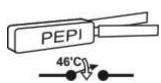
NORMALLY OPEN CONTACTS

Similar to PEPI TSW46 But shorts out on trigger. Self resets. 2.6A 125V max. Triggers at 46°C 15x3x7mm

TSW47

Code





TRANSFORMER 2A THERMAL CUT-OFFS

Goes open circuit if temperature is exceeded. Insulated. Used in transformers, motors, etc. Low DC to 240VAC 2A. Non-Resettable.

Approx.6.5x2.5x9mm Code TF117 Code TF125 Code TF130 117 125° 130°



TRANSFORMER 2A THERMAL CUT-OFFS

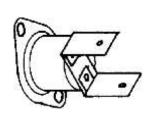
Goes open circuit if temperature is exceeded. Insulated. Used in transformers, motors, etc. -Resettable.

Low DC to 240	IVAC 2A. Non-
TF12-115	112°C
TF12-130	126°C
TF12-133	130°C
TF12-150	145°C
TF12-169	165°C
	=

THERMAL CUT-OFFS 10A

Thermal circuit breakers as used in appliances like microwave ovens. Self resetting. Thermal triggered. Rated at 10A 240Vac. Normally closed.

Temp.
70°C
75°C
80°C
85°C
95°C
100°C
105°C
110°C
115°C
120°C
125°C
130°C
135°C
140°C
145°C
150°C
155°C
160°C
165°C

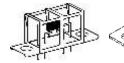


THERMAL CUT-OFFS 10A

Microtemps are Non-Resettable metal thermal fuses. They go open circuit if a temperature is exceeded. As used in appliences like toasters, heaters, etc. Rated at 240Vac 10A. ~60mm long.

Code MT070 MT072 MT072 MT076 MT080 MT085 MT092 MT096 MT100 MT115 MT115 MT123 MT126 MT123 MT126 MT128 MT135 MT135 MT135 MT145 MT145 MT145 MT145 MT145 MT145 MT152 MT145 MT155 MT167 MT167 MT169 MT180 MT182 MT185 MT185 MT185 MT185 MT185 MT192 MT185 MT192 MT195 MT215 MT215 MT225 MT225 MT240 MT245 MT255	Temp. 70°C 72°C 76°C 80°C 80°C 85°C 92°C 100°C 110°C 115°C 123°C 126°C 123°C 126°C 133°C 142°C 145°C 155°C 155°C 167°C 155°C 167°C 169°C 185°C 192°C 123°C 245°C 225°C 240°C 245°C 245°C 255°C
--	--









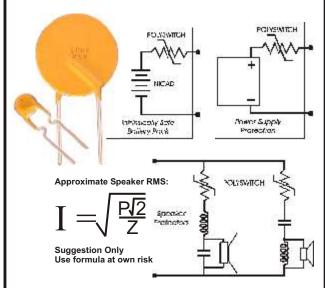
MICROWAVE THERMAL - SEE SECTION 10

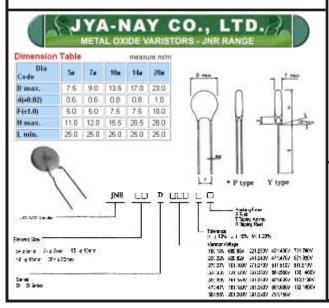
Vagner

PTC - POLYSWITCH PROTECTORS

The PolySwitch circuit protector is a positive temperature coefficient resistor that undergoes a large, quick increase in resistance when an over-current or high temperature heats it above a specific point. When the temperature reduces, the PolySwitch resets to resume normal operation. No manual resetting is required. There are numerous applications for this remarkable device. They can be used to protect batteries, power supplies, motors, transformers, speakers, AC/DC, etc. The following characteristics are for DC in still air at 20°C. Unfortunately the manufacturer does not give speaker wattage suggestions! For AC use Ohms Law and a mean value for ITRIP & IHOLD (Remember the RMS!)

Code RXE010 RXE017 RXE020 RXE025 RXE025 RXE030 RXE040 RXE050 RXE065 RXE075 RXE090 RXE110 RXE135 RXE160 RXE185 RXE185 RXE250 RXE300	I hold 0.10 0.17 0.20 0.25 0.30 0.40 0.50 0.65 0.75 0.90 1.10 1.35 1.60 1.85 2.50 3.00	I trip 0.20 0.34 0.40 0.50 0.60 0.80 1.00 1.30 1.50 2.20 2.70 3.20 3.70 5.00 6.00	$ \begin{array}{c} \textbf{Cold} \ \Omega \\ 2.50 \\ 2.00 \\ 1.83 \\ 1.25 \\ 0.88 \\ 0.55 \\ 0.50 \\ 0.31 \\ 0.25 \\ 0.20 \\ 0.015 \\ 0.020 \\ 0.05 \\ 0.009 \\ 0.005 \\ 0.004 \\ 0.0$

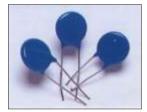




JNR VARISTORS from WES Components

Varistors are voltage dependent, nonlinear devices which have an electrical behaviour similar to *Back-To-Back Zener Diodes* and are used for the absorption of transient voltages, suppression of pulse noise and general circuit stabilization. Our JNR Series from www.jaynay.com.tw are premium quality and supercede previously available ranges.

Fast response Excellent voltage ratio High stabilization for circuit Vs Unparalleled absorption for transient voltage characteristics Bilateral and symmetrical V-I UL1414 UL1449 CSA VDE



Applications;

Surge protection in Consumer electronics Industrial electronics Telephone equipment Telecommunications Automotive instruments control and ignition systems. Measurment and control Gas & Petrolium Equipment Appliances, etc., etc. Absorption of switching surges for relays, switches, etc. Electro-static discharge Noise suppression Specific component protection transistors, triacs, ICs, etc.

METAL OXIDE VARISTORS JYA-NAY JNR SERIES

Zinc Oxide Voltage Dependent Resistors. Fast, Low-Leak MOVs. High Performance. Protects from Over-Voltage, Spikes, etc.

Code 7D101K 7D151K 7D220K 7D2241K 7D301K 7D391K 7D431K 7D431K 7D471K 7D561K 7D681K 10D201K 10D301K 10D301K 10D391K 10D431K 10D561K 10D681K 10D681K 10D681K	Vrms 60 95 14 150 195 2275 275 300 350 420 130 195 250 275 350 420 150	Vmax 100 150 22 240 300 390 430 430 470 560 680 200 300 390 430 680 680 240	Imax 1200 1200 500 1200 1200 1200 1750 1200 1750 2500 2500 3500 3500 3500 3500	Joules 7 11 1.3 16 21 30 40 40 35 45 48 28 42 70 80 90 92 67
14D271K	175	270	4500	79
14D301K	195	300	4500	84
14D361K	230	360	6000	130
14D391K	250	390	4500	120
14D431K	275	430	4500	132
14D471K	300	470	4500	140
14D561K	350	560	5000	190
14D621K	385	620	4500	164
14D681K	420	680	4500	172
20D431K	275	430	6500	364
20D781K	485	780	6500	368
25D471K	300	470	15000	225
34D471	300	470	40000	600
34D561	350	560	40000	710

DISCONTINUED SERIES

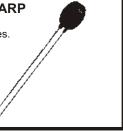
17M series
12M series
Wse 14D series
Use 10D series
Use 7D series

www.jyanay.com.tw



METAL OXIDE VARISTOR SHARP

Original part as used in Sharp appliances. Code VX0010



Capacitors 2 - 19

240VAC MAINS GLOBES

OVEN GLOBES

All sizes. High temp. See Section 10...

ENERGY EFFICIENT

New Economical power range from Sanyo See Section 12...

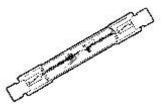


QUARTZ HALOGEN 250V

150W QHL150

300W QHL300

500W QHL500



QUARTZ HALOGEN LAMPS

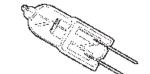
QHL50

20W 12V

50W 12V

Code

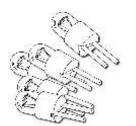
QHL20 Code



ALARM WARNING LAMP

"Bi-pin" Lamp. Stiff legs. 60mA As used in illuminated push button switches, etc. Order One to receive Five

BIP3125 for 5 BIP3145

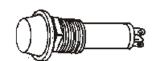


FAX 02 97980017

INDICATOR LAMP

Hole Diam' 7mm Volt 12 Colour Red Code PL8R

Colour Green PL8GN Code



INDICATOR LAMP REPLACEMENT

5mm Diam. 12 Volt 100mA

IL50-12 Code



CHROME BEZEL INDICATOR LAMP

LED Insert with resistor. 12V Suit 8mm diam' hole. Colour;

RED PL6R GREEN PL6GN YELLOW PL6YL



PILOT LAMP 5mm SCREW

Torches, Dial Lamps, etc. 652-6

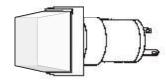
652-12



Qtty' Discounts available.

INDICATOR LAMP

Hole Diam' 15mm Lens 18mm Sqr. Volt 12 Colour Yellow Code



PILOT LAMP 9mm SCREW

*Torches, +Dial Lamps, etc.

Code	Volt
653-3LB	*2.2V
653-3SB	*2.2V
653-5	*5V
653-6	+6V
653-12	+12\/





CHROME BEZEL INDICATOR LAMP

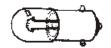
Hole Diam' 8mm. NEON Insert. Colour Green Code PL5GN



PILOT LAMP 9mm BAYONET

Torches, Dial Lamps, etc. 654-6

12V 654-12

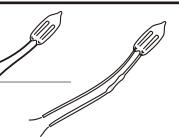


NEON LAMP

90Vac Code

Pigtail Type NE2

With Buffer Resistor 240Vac Pigtail Type NĔ12 Code

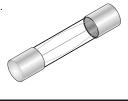


FUSE LAMPS 150mA 6.35mmx32mm

Same shape as a 3AG/MGC/TDL fuse.

Code 754-6 6v 754-8

754-12 12v See fuse blocks for holders.



LEAD LAMPS 60mA 3mm

Supplied individually (order one to receive one).

NL692-3-6 6V NL692-3-9 9V NL692-3-12 12V



WIRE TERMINAL 60mA 5mm

Order One to receive a bag of FIVE

Code V WT5125 12V



LEAD LAMPS 60mA 4mm

Code V NL692-4-6 6V NL692-4-9 9v NL692-4-12 12V



AXIAL LAMPS 100mA 3mm

Order One to receive a bag of FIVE

Code V AXL365 6V AXL395 9V AXL3125 12V



LEAD LAMPS 60mA 5mm

Code V NL692-5-6 6V NL692-5-9 9V NL692-5-12 12V



AXIAL LAMPS 100mA 4mm

Order One to receive a bag of FIVE

Code V AXL465 6V AXL495 9V AXL4125 12V



WIRE TERMINAL 60mA 2.3mm

Order One to receive a bag of FIVE

Code V WT265 6V WT295 9V WT2125 12V



AXIAL LAMPS 100mA 5mm

Order One to receive a bag of FIVE

Code V AXL565 6V AXL595 9V AXL5125 12V



WIRE TERMINAL 30mA 3mm



Some car stereo front panels have coloured lighting using the low current wire terminal lamps below with the original rubber covers. (Re-use the original covers.) Order one to receive a bag of five!

Code Size V/I IL3065 3mm 6V 30mA IL3095 3mm 9V 30mA IL30125 3mm 12V 40mA

SMALL WEDGE LAMPS 100mA 5mm

Order One to receive a bag of FIVE

Code V WL565 6V WL5125 12V



WIRE TERMINAL 60mA 3mm

Order One to receive a bag of FIVE Code V

Code V WT365 6V WT385 8V WT395 9V WT3125 12V



WEDGE LAMPS 250mA 10mm

Order One to receive a bag of FIVE

Code V WL1065 6V WL1085 8V WL10125 12V



WIRE TERMINAL 60mA 4mm

Order One to receive a bag of FIVE

Code V WT465 6V WT495 9V WT4125 12V WT4145 14V



BI-PIN LAMPS 60mA 4mm & 5mm

Order One to receive a bag of FIVE

Code Globe **BIP465** 6V 4mm BIP565 6V 5mm **BIP485** 8V 4mm BIP3125 12V 3mm BIP4125 12V 4mm BIP5125 12V 5_{mm}



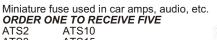
40A

50A

60A



ATS AUTOMOTIVE FUSES Mini 11mm

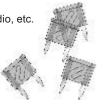


ATS3 ATS4 ATS15 ATS20 ATS5 ATS25 ATS7.5 ATS30

Card

Card

ATS35



HIGH CURRENT 5AG FUSES

Gold plated as used in high-end audio. See Section 18 for Soundlink fuse holders. Order One to Receive Five

MFI 40 MFI 10 10A MFL50 MFI 20 20A MFL30 30A MFL60

ATC AUTO FUSE Pop. 18mm

Popular type "Spade terminal" As used in many of today's cars. ORDER ONE TO RECEIVE FIVE

ATC2 ATC3 ATC4 ATC5 ATC10 ATC15 ATC20 ATC25 ATC7.5 ATC30

ATC35

CIRCUIT PROTECTOR CHIPS - F

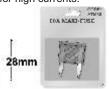
Code Current ICPF10 400mA ICPF15 600 ma ICPF20 800 ma ICPF25 1 A ICPF38 1.5A ICPF50 2 A ICPF75 2.7A



ATM MAXI-FUSE Large 28mm

Jumbo sized and Gold plated for high currents.

ATM20 Code ATM30 ATM40 ATM50 ATM60 ATM70 ATM80



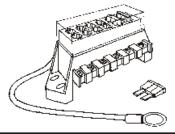
CIRCUIT PROTECTOR CHIPS - N

Code ICPN5 Current 250 mA ICPN10 400 mA ICPN15 600 mA ICPN20 800 mA ICPN25 1 A ICPN38 1.5A ICPN50 2 A ICPN75 2.7A



ATC FUSE BLOCK

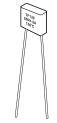
Designed for multiple hook-up of accessories. each with individual screw terminal outputs. Accepts up to six fuses. (Not included) See ATC ÁFB400



2A THERMAL FUSES

(TEMP) (117°) (125°) CODE TF117 TF125 TF130 (130°





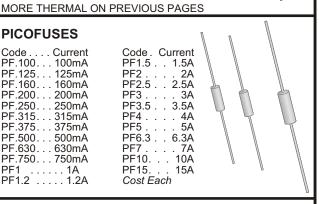
ATC INLINE FUSE

General purpose Suit ATC plug-in fuses with wiring No soldering required. Fuse not included. Code JEF703



PICOFUSES

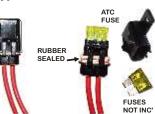
Code . Current PF1.5 . . 1.5A Current Code PF.100...100mA PF.125. 125mA PF2 2A PF2 . . PF2.5 . 2.5A PF.160 160mA 200mA PF.200. PF3 . . 3A 3.5A PF.250 250mA PF3.5 . . PF.315 PF.375 4A 5A 315mA PF4 . . PF5 375mA PF.500. PF6.3 . 500mA 6.3A PF.630.. 630mA PF7 7A PF.750...750mA PF10. 10A 15A PF1.2 1.2A



ATC WATER RESISTANT

Heavy duty design for use in unprotected places on boats, under car bonnets, etc. Fuse not included. MAX Code FH18





MICRO FUSES TIME LAG 8mm x 8mm

Cost Each

ETF100 100mA ETF125 ETF160 125mA 160mA 200mA ETF200 ETF250 250mA **ETF315** 315mA FTF400 400mA **ETF500** 500mA ETF630 ETF800 630mA 800mA ETF1 1A 1.25A ETF1.25 ETF1.6 1.6A 2A 2.5A 3.15A FTF2 ETF2.5 ETF3.15 4A 5A 6.3A ETF4 ETF5



GBC AUTO FUSE

GBC5 GBC8 GBC16 GBC20 GBC25 GBC35



FUSE HOLDERS

Chassis mount. Bakelite. 20x5mm CEB/TBX

32x6.35mm MGC/TDL Code FH2



MGC/TDL WEATHER-PROOF

RUBBER BOOT TYPE

Heavy duty Water proof Yellow rubber 3AG 15A Max Chromium Crimp FH306 Code



FUSE HOLDER

Screws open with a coin or scredriver. Chassis mount. Extrudes only 2mm Hi-Temp plastic. 20x5mm CEB/TBX FH31 Code



SCREW-DOWN FUSE HOLDER

Chassis mount 20x5mm CEB/TBX Code FH14

32x6.35mm MGC/TDL FH16 Code



FUSE HOLDERS

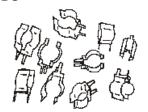
Bayonete lid opens with a scredriver Chassis mount. Bakelite, 10A. 32x6.35mm MGC/TDL Code FH21



PCB MOUNT FUSE ENDS

Order one to receive ten. 5mm CEB/TBX Code

6.35mm MGC/TDL Code



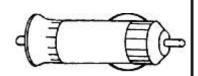
MGC/TDL FUSE HOLDER

Chassis mount Suit 32 x 6.35mm fuse Clip off face. FH12 Code



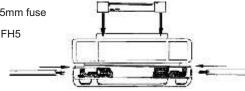
MGC/TDL FUSE HOLDER

Inside cigarette lighter plug Suit 32 x 6.35mm fuse Code



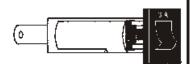
MGC/TDL FUSE HOLDER

In-line kit Suit 32 x 6.35mm fuse Clear plastic Code



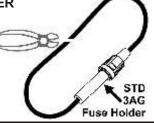
PANEL MOUNT BREAKERS

Thermal, Resettable, 240VAC or Low DCV PCB2 PCB3 3A PCB5 5A PCB10 10A PCB15 15A



MGC/TDL FUSE HOLDER

In-line with lead. Suit 32 x 6.35mm fuse Popular bayonet type Ready made with wire No soldering required. Code



FUSE WIRE

Domestic fuse box type. 8 & 16A fuse wire wrapped on a card FW816 Code



SEE SECTION 12 FOR ELECTRICAL

MGC/TDL HEAVY DUTY

Wired with 12 gauge Suit 32 x 6.35mm fuse Screw barrel. High temperature plastic No soldering required. Code FH8 Code

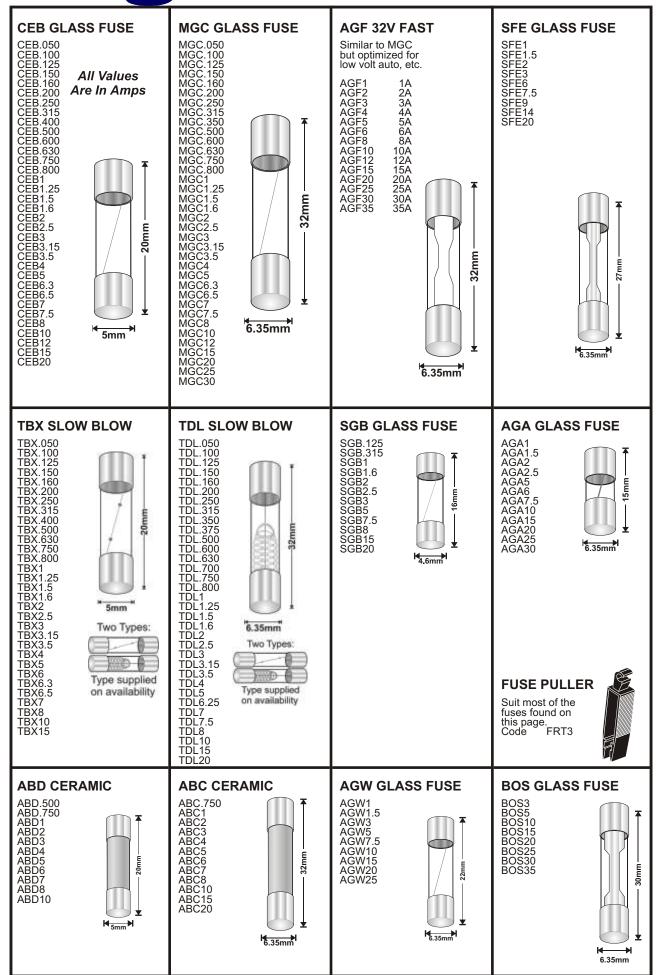


SOUNDLINK GOLD SERIES

AUTOMOTIVE FUSES See section 18 for our range of Gold Plated Heavy Duty Car stereo Fuse blocks.







2 - 24 Fuses

SOLID STATE RELAY 40A

in $4\rightarrow32Vdc/12\rightarrow5mA$ iso $10G\Omega/4000Vac$

Vout 250Vrms AC lout 10Arms AC Code KSD210AC8

Vout 250Vrms AC lout 40Arms AC Code KSD240AC8

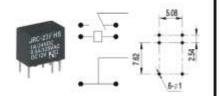
Vout 480Vrms AC lout 40Arms AC Code KSD440AC8

www.wescomponents.com/DataSheets/KSD440AC8.pdf etc.

RELAY PCB 12VDC SP-DT

Coil 12Vdc 0.15W SW 24Vdc 1A 125Vac ½A

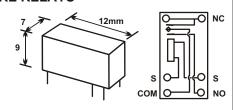
Size 12.5x7.5x10 Pins 6x Code JRC23F



5V MINIATURE RELAYS

As used in telephones etc.

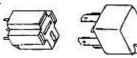
Code SY-5



AUTOMOTIVE RELAY

12V 30A Tag mount SPDT TW3415

+ HOLDERS TO SUIT: **SOLDER TERMINALS** Code TW3417 **80cm WIRING HARNESS** Code TW3416





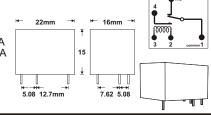
MINIATURE POWER RELAY SPDT

Gold-overlay Silver-alloy Coil 12Vdc/25mA

Code

Contact 120W/960VA Amax 5A Vmax 250Vac

LZ12HK



4PDT HIGH QUALITY RELAY

Heavy duty construction. Reliable. PCB mount. Silver Contacts. 12V Coil.160 Ohm. 4PDT 5A Code FRL264







REED DIP RELAY - SPST

Code RL1A05 12Vdc 1K Ω Code RL1A12



POWER RELAY - POPULAR REPLACEMENT TYPE

Sealed, low profile. Std DIN pinouts. 5A/10A 240VAC contacts. 25mm 5mm 13x17 DPDT FTR212 SPDT FTR122 24VDC 1K1 Ω DPDT FTR224 SPDT FTR124

REED DIP RELAYS - SPDT

Can be driven directly by TTL, etc. Vmax 100VDC/ACpeak Imax $\frac{1}{4}$ Aswitch $\frac{1}{2}$ Acary 5Vdc 500 Ω Code RL1C05 12Vdc 1K Ω

Code RL1C12

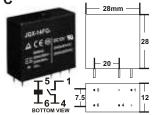


POWER RELAY JQX-14FC

Compact PCB Mount 10A 30Vdc/240Vac

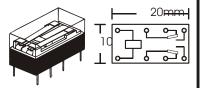
12VDC 530mW SPST JQX14F12

48VDC 530mW SPST JQX14F48



MINIATURE PCB DIL RELAYS

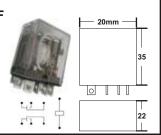
Suit VCR's etc. G2VN-6 6V G2VN-9 9V G2VN-12 12V G2VN-24 24V



POWER RELAY JQX-13F

Tag mount DPDT 10A 28VDC/277VAC Coil Code 12V JQX13F12 24V JQX13F24

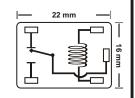
240Vac Coil 240V JQX13F240



NEC RELAYS

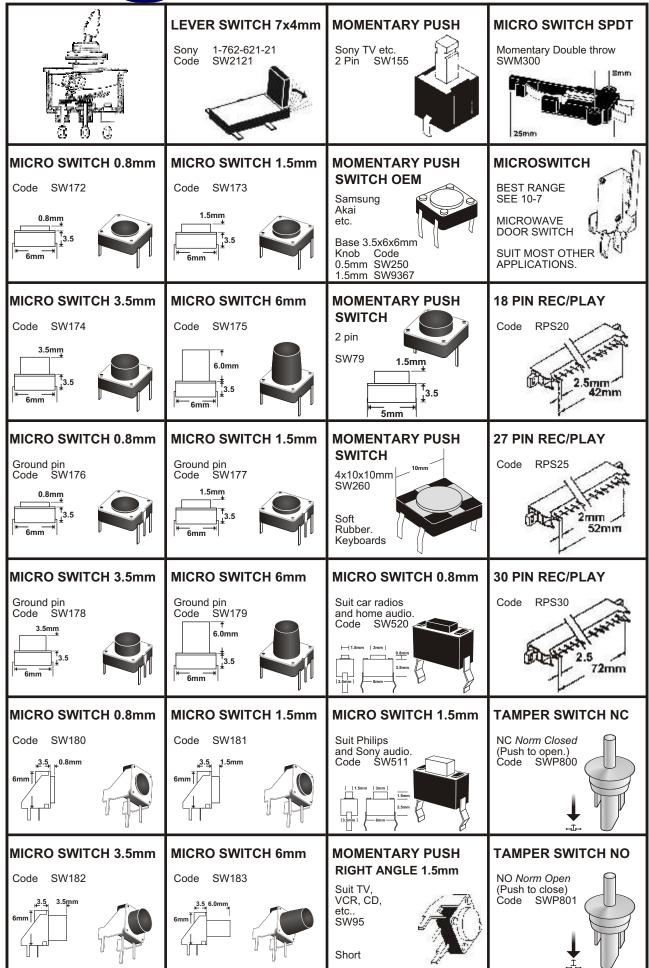
SPDT PCB type. 10A(240VAC/30VDC) MR301-12 12V MR301-24 24V





Relays 2 - 25





2 - 26 Switches



ELECTRONIC SERVICES A/Asia 138 LIVERPOOL RD ASHFIELD 2131 PH 02 97989233 FAX 02 97980017

MOMENTARY

NORMALLY OPEN SWM201

NORMALLY CLOSED SWM202



SUBMINIATURE

1.5A 250V SPDT Code SWT102



Centre off

6A 250V DPDT Code SWT134



DPST ROCKER SWITCH

Snap fit 20x13mm 4A-240V SW200



PUSH BUTTON

MOMENTARY NORM OPEN SWM203

PUSH ON PUSH OFF SWP305



SUBMINIATURE

1.5A 250V DPDT Code SWT106



Standard

1.5A 250V SPST Code SWT12



DPST ILLUMINATED

Green 240VAC 20x13mm 4A-240V SW205



PUSH BUTTON

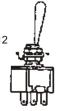
MOMENTARY NORM OPEN SWM205

PUSH ON PUSH OFF SWP308



MINIATURE

3A 250V SPDT Code SWT112



Standard

1.5A 250V DPST Code SWT123



DPST ROCKER

Snap fit 20x22mm 5A-240V SW202

Lamp switch

SPST Code

SWP312

DPST Code SWP313



MINIATURE

Centre off 3A 250V SPDT Code SWT113



Standard

1.5A 250V DPDT Code SWT125



COMPUTER POWER

Snap fit 25x25mm 10A-240V SW203

MOMENTARY

3A 125VAC 6mm Panel mount. DPDT

Red MS300R Black MS300B



MINIATURE

3A 250V DPDT Code SWT117



Heavy duty

Centre off 3A 250V DPDT Code SW



DPDT ROCKER

Snap fit 30x22mm 10A-240V SW220



Heavy Duty 6A 250V DPDT Push on, push off Code SWP328



MINIATURE

Centre off 3A 250V DPDT Code SWT118



SPST ROCKER SWITCH

Snap fit 20x13mm 6A-240V SW210



DPDT ILLUMINATED

RED fit 30x22mm 10A-240V SW225

Kick Switch

Extra HD 3 Pole 2 Throw Suit I/O Guitar Peddles SW3PDT



TOGGLE SWITCH

6A 250V DPDT Code SWT132



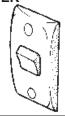
SPDT ROCKER SWITCH

Snap fit 20x13mm 6A-240V SW215



MAINS POWER

SEE SECTION TWELVE



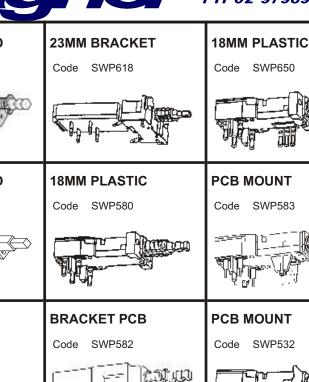
Switches 2 - 27

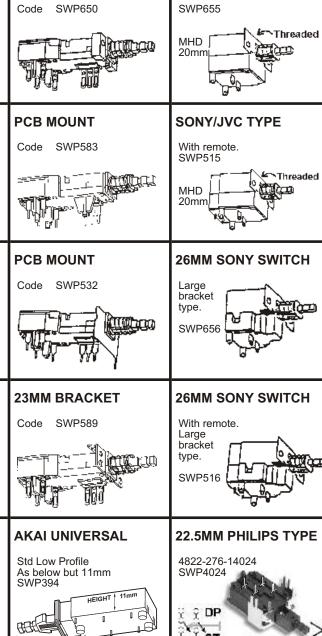


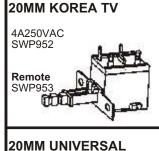
ELECTRONIC SERVICES A/Asia 138 LIVERPOOL RD ASHFIELD 2131 PH 02 97989233 FAX 02 97980017

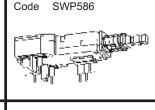
SONY/JVC TYPE

20MM THREADED AT-PC Computer SWP670 20MM THREADED 250V SPST DS685 **20MM PCB TYPE** Same as DS685 but PCB mount. Sony etc. DS686 MHD 20mm 19MM THREADED Tags & Remote SWP640

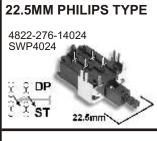




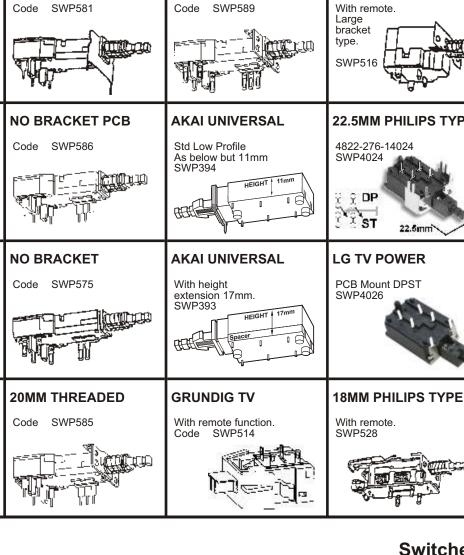




PCB MOUNT



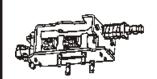




Switches

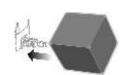
18MM PHILIPS TYPE

SWP658



KNOBS

KNB681 10x10x10mm

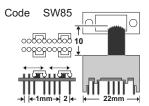


MICRO SWITCH 20mm

5A 250V Code SWM400

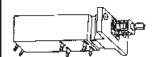


4P3T SLIDE SWITCH



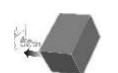
23MM PHILIPS TYPE

With remote. SWP622



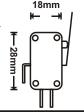
KNOBS

KNB682 15x10x10mm

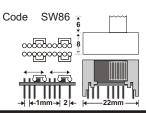


MICRO SWITCH 28mm

10A 250V 25mm Lever SPDT SWM420



4P3T SLIDE SWITCH



20MM PHILIPS

482227613816 PCB Mount SWP3816



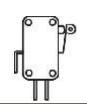
KNOBS

KNB683 ROUND 10x10mm



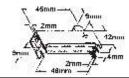
MICRO SWITCH 28mm

3A 250V Roller Lever SPDT SWM424



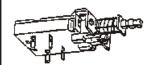
8P4T SLIDE SWITCH

8 Pole 4 Position 40 Pin Code SW90



20MM THREADED

PCB & TAGS (Sony/Sharp) SWP625

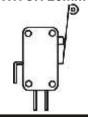


KEY LOCK Physical

90° Turns 25mm arm 19mm hole AKL101

MICRO SWITCH 28mm

3A 250V Roller Lever SPDT SWM425



ILLUMINATED TOGGLE

12V 20A DPST Snap Fit 37x21mm Very HQ Push SW SW-VAD1



20MM THREADED

AT-PC Computer SWP670



KEY LOCK SP3T

3 Position 24VDC 4A 240VAC 2A 19mm Hole AKS8071



MICROWAVE SWITCHES

For our extensive range of Micro switches See Microwave Section Ten

ILLUMINATED TOGGLE

Momentary 12V 20A DPST Snap Fit 37x21mm Very HQ SW-VBD1

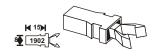


23MM THREADED

DPST with momentary (reset) SWP641

DOOR CATCHER SMALL

Push close, Push open Code DL1902



VOLUME SWITCH

Volume Control with switch, See 3-1 and 2-16

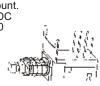
ILLUMINATED TOGGLE

Center Off 12V 20A DPDT Snap Fit 37x21mm Very HQ SW-VJD1



MINI DC SWITCH

TE5BW etc. PCB mount. 2A 12VDC SWP150



SECTION

12



Dust & Water Seals

Snap Fit CARLING
Switch

ILLUMINATED TOGGLE

Momentary Center Off 12V 20A DPDT Snap Fit 37x21mm SW-VLD1



Switches 2 - 29



Email: sales@wagner.net.au Phone: +61-2-9798-9233 Fax: +61-2-9798-0017