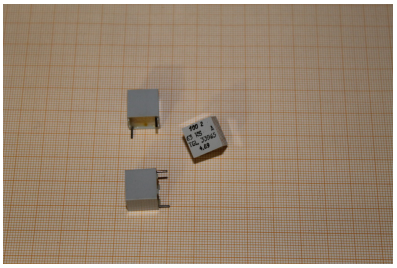
capacitors

KS capacitors in plastic housing according to TGL 38158 and TGL 33965



The **KS capacitors** according to **TGL 33965** and **TGL 38158** are **polystyrene capacitors** in a prismatic plastic housing. The capacitors are high-quality passive electronic components and were intended for use in commercial radio and telecommunications technology. The KS capacitors are very well protected against environmental influences due to the installation of the capacitor windings in the epoxy resin cast plastic cup, which has a very positive effect on the constancy of the characteristic values.According to the requirements of the area of application of the capacitors according to TGL 33965 and TGL 38158, these were manufactured with finely graded nominal capacitance values of the E192 series and additionally with small capacitance tolerances. Tin foil was used to cover the capacitors, which led to a particularly contact-safe and low-inductance winding structure as well as good long-term stability of the capacitance.

Differences between the KS capacitors TGL 33965 and TGL 38158

The capacitors of the TGL 38158 can be flow-soldered if the limit values are to be observed. The KS capacitors of the TGL 33965 differ from those of the TGL 38158 in terms of their design, the extended nominal capacitance range and the possibility of manufacturing them as double capacitances in the range from 2x100pF to 2x9090pF. Furthermore, these capacitors have a higher long-term stability of the nominal capacity. The capacitors of the TGL 33965 are available in the P design for selected values, which has a dielectric made of polypropylene film instead of the polystyrene film. The capacitors were manufactured in the following designs:

- Form A and Form B – include single capacitances
- Form C and Form D - contain double capacitances
- Design B and design D differ from A and C in some parameters by better values (tolerance, temperature coefficient - TC or temperature-dependent change in capacitance)

The individual capacitors of the double capacitors of type C and type D can also have different nominal capacitances of the E192 series.

Characteristic values of the prismatic KS capacitors according to TGL 33965

parameter	characteristic value	Remarks
Nominal voltage U_N	25V and 63V	
permissible AC voltage WS U_{eff}	15V	for U_N = 25V

	40V	for U_N = 63V
permissible alternating current I_{eff}	≤0.2A	
Rated capacities C_N	100pF to 27000pF	U_N = 63V, E192 series
	9200pF to 56000pF	U_N = 25V, E192 series
Rated Capacity Tolerance	±0.5%, ±1%, ±2%, ±5%	
loss factor tan δ	≤ $2 * 10^{-4}$	Type A, B, C, D f = 1kHz
	≤ $3 * 10^{-4}$	Design A, B, C, D for C_N ≤ 1000pF and f = 100kHz
	≤ $8 * 10^{-4}$	Type A, C for C_N ≤ 10000pF and f = 100kHz
	≤ $5 * 10^{-4}$	Type B, D for C_N ≤ 10000pF and f = 100kHz
	≤ $8 * 10^{-4}$	Type A, C for C_N ≤ 1000pF and f = 1MHz
	≤ $5 * 10^{-4}$	Type B, D for C_N ≤ 1000pF and f = 1MHz
insulation resistance	$1 * 10^{11}\Omega$	Type A, C, D, P
	$2 * 10^{11}\Omega$	Type B
temperature coefficient α_c	-(25 to 150) * 10^{-6} /K	Type A, C_N ≤ 2200pF
	-(75 to 200) * 10^{-6} /K	Type A, C_N > 2200pF
	-(50 to 110) * 10^{-6} /K	Type B, C_N ≤ 800pF
	-(75 to 135) * 10^{-6} /K	Type B, C_N ≤ 4000pF
	-(100 to 160) * 10^{-6} /K	Type B, 20nF < C_N ≤ 82.5nF
	-(25 to 175) * 10^{-6} /K	Type C
	-(50 to 140) * 10^{-6} /K	Type D
	-(230 to 400) * 10^{-6} /K	Type P
temporal inconsistency of capacity	≤ ±(0.2% + 0.5pF)	after a year
	≤ ±1%	Type P
climate test class	40/070/21	

Characteristics of the prismatic capacitors of the TGL 38158

parameter	**characteristic value**	**Remarks**
Nominal voltage U_N	25V and 63V	
permissible AC voltage WS U_{eff}	15V	for U_N = 25V
	40V	for U_N = 63V

permissible alternating current I_{eff}	≤0.2A	
Rated capacities C_N	180pF to 47000pF	U_N = 25V, E192 series
	180pF to 18000pF	U_N = 63V, E192 series
Rated Capacity Tolerance	±1%, ±2%, ±5%	
loss factor tan δ	$\leq 2 * 10^{-4}$	for $C_N \leq$ 1000pF and f ≤ 10kHz
	$\leq 10 * 10^{-4}$	for $C_N \leq$ 1000pF and f = 1MHz
	$\leq 4 * 10^{-4}$	for $C_N >$ 22000pF and f = 1kHz
	$\leq 8 * 10^{-4}$	for $C_N >$ 22000pF and f = 100kHz
insulation resistance	$1 * 10^{11\Omega}$	
temperature coefficient α_c	$-(25 \text{ to } 150) * 10^{-6}$ /K	$C_N \leq$ 796pF
	$-(40 \text{ to } 160) * 10^{-6}$ /K	$C_N \leq$ 22000pF
	$-(70 \text{ to } 170) * 10^{-6}$ /K	$CN >$ 22000pF
temporal inconsistency of capacity	≤ ±(0.3% + 0.4pF)	after a year
climate test class	40/070/21	

#DDR Capacitors #KS Capacitors #Polystyrene Capacitors

DDR additional memory ZS02 for F2000 from RFT

Measuring attachment WL41 according to TGL 37533

You may also be interested in this

Treasure trove for hobbyists

TGL 24685 RFT connector DDR

I have just received an inquiry about my offer of the TGL 24685 on ebay. That's why I would like to give more details about the sockets offered. This is specifically the...

Read more

Treasure trove for hobbyists

Incremental rotary encoder Robotron 2000-D TGL 34235

With the incremental rotary encoder Robotron 2000-D TGL 34235 I will show you one of the optoelectronic transducers. When the transducer shaft rotates, this gives an angle-proportional number...

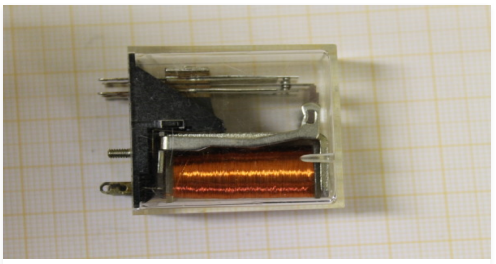
Read more

Treasure trove for hobbyists

Robotron M7512 CPR pressure transducer

If you are interested in a Robotron M7512 HLW pressure transducer, then take a look at the current offer on ebay. Unfortunately I don't have much information about the DDR spare part. Insofar...

Read more



relay

30.2-024 - DDR Relay TGL 200-3796

The relay 30.2-024 is a type of DDR hinged armature relay according to TGL 200-3796. The type 30.2 is type C, specifically type C1, which is plug-in connection for socket C or solder connection with...

Read more

Search

Search

Latest posts