

ATS/ATS-SM SERIES



QUARTZ CRYSTAL

FEATURES

- Standard HC-49/US [thru-hole] and HC-49/US-SM [surface mount] Packages
- Stable Frequency Over Temperature and Drive Level
- Fundamental and 3rd Overtone Crystals
- Frequency Range 3.2 64 MHz
- Frequency Tolerance, ±30 ppm Standard
- Frequency Stability, ±50 ppm Standard
- Operating Temperature, -20°C to +70°C Standard, -40°C to +85°C Available
- Tape & Reel Packaging Available
- RoHS/Green Compliant [6/6]



APPLICATIONS

The ATS/ATS-SM crystal series offers excellent long-term stability and reliability in a proven resistance-weld metal package. The excellent shock performance makes it suitable for microprocessor, telecommunication, industrial, consumer electronics and networking applications.

ORDERING INFORMATION **ATS** ATS-SM ATS \square ATS \square \square SM - \square PRODUCT OPTIONS TEMPERATURE RANGE OPTIONS INS - Insulation Spacer Blank - Standard, -20°C to +70°C E - Extended Temperature Range, TEMPERATURE RANGE OPTIONS -40°C to +85°C Blank - Standard, -20°C to +70°C E - Extended Temperature Range, PACKAGING OPTIONS -40°C to +85°C Blank - Bulk 1 - Tape and Reel ** PACKAGING OPTIONS Blank - Bulk FREQUENCY 1 - Radial Taping (Ammopak) * Product Frequency/Load Code. [3 to 4 digits] FREQUENCY Refer to Standard Product Part Numbers Product Frequency/Load Code. tables on Pages 2 and 3. [3 to 4 digits] Refer to Standard Product Part Numbers ** Standard packaging is tape and reel. tables on Pages 2 and 3. CTS Distributors may use -T for tape and reel indicator. * Standard packaging is bulk in a bag.

Non-Standard Ordering Options

Contact your local CTS Representative or CTS Inside Sales Representative for assistance.



ATS/ATS-SM SERIES LOW COST QUARTZ CRYSTAL

STANDARD PRODUCT PART NUMBERS - ATS

Part numbers in **BOLD** are common stock items through CTS authorized distributors. Non-bold part numbers may be stocked or are available for order.

Part num	ers in BOLD are common stock items through CTS authorized distributors. Non-								
FREQUENCY	PART	PART	LOAD	OPERATING	FREQUENCY	PART	PART	LOAD	OPERATING
(MHz)	NUMBER	NUMBER	CAPACITANCE		(MHz)	NUMBER	NUMBER	CAPACITANCE	MODE
	-20/70°C	-40/85°C	ON NOTHINGE			-20/70°C	-40/85°C		
	ATS036B	ATS036B-E	Series	Fundamental		ATS126	ATS126-E	Series	Fundamental
3.579545	ATS036	ATS036-E	18 pF	Fundamental	12.352000	ATS127	ATS127-E	20 pF	Fundamental
3.686400	ATS037A	ATS037A-E	Series	Fundamental	13.500000	ATS135	ATS135-E	20 pF	Fundamental
3.686400	ATS037	ATS037-E	20 pF	Fundamental	14.318180	ATS143	ATS143-E	Series	Fundamental
3.686400	ATS037B	ATS037B-E	18 pF	Fundamental	14.318180	ATS14A	ATS14A-E	20 pF	Fundamental
4.000000	ATS04A	ATS04A-E	Series	Fundamental	14.318180	ATS143B	ATS143B-E	18 pF	Fundamental
4.000000	ATS040	ATS040-E	20 pF	Fundamental	14.745600	ATS147	ATS147-E	Series	Fundamental
4.000000	ATS040B	ATS040B-E	18 pF	Fundamental	14.745600	ATS147A	ATS147A-E	20 pF	Fundamental
4.096000	ATS042A	ATS042A-E	20 pF	Fundamental	14.745600	ATS147B	ATS147B-E	18 pF	Fundamental
4.096000	ATS042B	ATS042B-E	18 pF	Fundamental	15.000000	ATS150	ATS150-E	Series	Fundamental
4.194304	ATS041C	ATS041C-E	12 pF	Fundamental	15.360000	ATS15A	ATS15A-E	20 pF	Fundamental
4.915200	ATS049A	ATS049A-E	Series	Fundamental	16.000000	ATS160	ATS160-E	Series	Fundamental
	ATS042	ATS042-E	20 pF	Fundamental	16.000000	ATS16A	ATS16A-E	20 pF	Fundamental
4.915200	ATS049B	ATS049B-E	18 pF	Fundamental	16.000000	ATS16B	ATS16B-E	18 pF	Fundamental
5.000000	ATS050C	ATS050C-E	Series	Fundamental	16.384000	ATS164B	ATS164B-E	18 pF	Fundamental
5.000000	ATS050A	ATS050A-E	20 pF	Fundamental		ATS169	ATS169-E	20 pF	Fundamental
5.000000	ATS050B	ATS050B-E	18 pF	Fundamental	18.000000	ATS180A	ATS180A-E	20 pF	Fundamental
	ATS051	ATS051-E	Series	Fundamental	18.432000	ATS184	ATS184-E	Series	Fundamental
5.068800	ATS050	ATS050-E	20 pF	Fundamental		ATS18A	ATS18A-E	20 pF	Fundamental
6.000000	ATS060A	ATS060A-E	Series	Fundamental	18.432000	ATS184B	ATS184B-E	18 pF	Fundamental
6.000000	ATS060	ATS060-E	20 pF	Fundamental	19.660800	ATS196	ATS196-E	Series	Fundamental
6.000000	ATS060B	ATS060B-E	18 pF	Fundamental	19.660800	ATS19A	ATS19A-E	20 pF	Fundamental
6.000000	ATS060C	ATS060C-E	32 pF	Fundamental	19.660800	ATS196B	ATS196B-E	18 pF	Fundamental
6.144000	ATS061	ATS061-E	20 pF	Fundamental	20.000000	ATS200	ATS200-E	Series	Fundamental
	ATS061B	ATS061B-E	18 pF	Fundamental		ATS20A	ATS20A-E	20 pF	Fundamental
6.144000	ATS061C	ATS061C-E	32 pF	Fundamental	20.000000	ATS200C	ATS200C-E	18 pF	Fundamental
7.372800	ATS073A	ATS073A-E	Series	Fundamental	20.000000	ATS20B	ATS20B-E	50 pF	Fundamental
7.372800	ATS073	ATS073-E	20 pF	Fundamental		ATS204	ATS204-E	20 pF	Fundamental
7.372800	ATS073B	ATS073B-E	18 pF	Fundamental	22.118400	ATS22A	ATS22A-E	20 pF	Fundamental
7.500000	ATS075	ATS075B-E	Series	Fundamental	22.118400	ATS221B	ATS22A-E ATS221B-E	18 pF	Fundamental
	ATS075A	ATS075-E	20 pF	Fundamental		ATS240	ATS240-E	Series	Fundamental
7.500000	ATS075B	ATS075A-E ATS075B-E	18 pF	Fundamental	24.000000	ATS240	ATS240-E	20 pF	Fundamental
8.000000	ATS080	ATS075B-L ATS080-E	Series	Fundamental	24.000000	ATS24A ATS240B	ATS24A-L ATS240B-E	18 pF	Fundamental
8.000000	ATS08A	ATS080-E	20 pF	Fundamental		ATS240B	ATS240B-L ATS240C-E	12 pF	Fundamental
8.000000	ATS08A	ATS080B-E	18 pF	Fundamental	24.576000	ATS2400	ATS240C-L ATS245-E	Series	Fundamental
		ATS080C-E							
8.000000 8.192000	ATS080C ATS081B	ATS080C-E ATS081B-E	32 pF 18 pF	Fundamental Fundamental		ATS24B ATS245A	ATS24B-E ATS245A-E	20 pF 18 pF	Fundamental Fundamental
									Fundamental
9.830400	ATSO99	ATSOOR F	Series	Fundamental	25.000000	ATS250	ATS250-E	Series	
9.830400 9.830400	ATSO98	ATSOOR F	20 pF	Fundamental	25.000000 25.000000	ATS25A ATS250B	ATS25A-E	20 pF	Fundamental
	ATS098B ATS100	ATS098B-E	18 pF	Fundamental			ATS250B-E	18 pF	Fundamental
		ATS100-E	Series	Fundamental		ATS270A	ATS270A-E	20 pF	Fundamental
	ATS10A	ATS10A-E	20 pF	Fundamental		ATS270B	ATS270B-E	18 pF	Fundamental
	ATS100B	ATS100B-E	18 pF	Fundamental		ATS320	ATS320-E	Series	3rd Overtone
	ATS111A	ATS111A-E	Series	Fundamental		ATS32A	ATS32A-E	20 pF	3rd Overtone
11.059200	ATS111	ATS111-E	20 pF	Fundamental		ATS320B	ATS320B-E	18 pF	3rd Overtone
11.059200	ATS111B	ATS111B-E	18 pF	Fundamental		ATS400	ATS400-E	Series	3rd Overtone
	ATS111C	ATS111C-E	32 pF	Fundamental		ATS40A	ATS40A-E	20 pF	3rd Overtone
12.000000	ATS120	ATS120-E	Series	Fundamental		ATS400B	ATS400B-E	18 pF	3rd Overtone
	ATS12A	ATS12A-E	20 pF	Fundamental		ATS480A	ATS480A-E	20 pF	3rd Overtone
	ATS120B	ATS120B-E	18 pF	Fundamental		ATS480B	ATS480B-E	18 pF	3rd Overtone
12.000000	ATS120C	ATS120C-E	32 pF	Fundamental		ATS600A	ATS600A-E	20 pF	3rd Overtone
12.288000	ATS125	ATS125-E	Series	Fundamental		ATS600B	ATS600B-E	18 pF	3rd Overtone
	ATS122	ATS122-E	20 pF	Fundamental		ATS640A	ATS640A-E	20 pF	3rd Overtone
12.288000	ATS122B	ATS122B-E	18 pF	Fundamental	64.000000	ATS640B	ATS640B-E	18 pF	3rd Overtone
12.296000	ATS124	ATS124-E	Series	Fundamental					

12.296000 ATS123

12.296000 ATS123B

ATS123-E

ATS123B-E

Fundamental

Fundamental

20 pF

18 pF



ATS/ATS-SM SERIES LOW COST QUARTZ CRYSTAL

STANDARD PRODUCT PART NUMBERS - ATS-SM

	numbers in BOLD a			S authorized dis	tributors. Non-l	oold part numbers	may be stocked	or are available for	order.
FREQUENCY	PART	PART	LOAD	OPERATING	FREQUENCY	PART	PART	LOAD	OPERATING
(MHz)	NUMBER	NUMBER	CAPACITANCE	MODE	(MHz)	NUMBER	NUMBER	CAPACITANCE	MODE
, ,	-20/70°C	-40/85°C	OAI AOITANOL		• •	-20/70°C	-40/85°C		WODE
	ATS036BSM-1	ATS036BSM-1E	Series	Fundamental	14.318180	ATS143SM-1	ATS143SM-1E	Series	Fundamental
3.579545	ATS036SM-1	ATS036SM-1E	18 pF	Fundamental	14.318180	ATS14ASM-1	ATS14ASM-1E	20 pF	Fundamental
3.686400	ATS037ASM-1	ATS037ASM-1E	Series	Fundamental	14.318180	ATS143BSM-1	ATS143BSM-1E	18 pF	Fundamental
3.686400	ATS037SM-1	ATS037SM-1E	20 pF	Fundamental	14.745600	ATS147SM-1	ATS147SM-1E	Series	Fundamental
3.686400	ATSO4ASM-1	ATSO4ASM-1E	18 pF	Fundamental	14.745600	ATS147ASM-1	ATS147ASM-1E ATS147BSM-1E	20 pF	Fundamental
4.000000 4.000000	ATS04ASM-1 ATS040SM-1	ATS04ASM-1E ATS040SM-1E	Series	Fundamental	14.745600 15.000000	ATS147BSM-1 ATS150SM-1	ATS147BSW-1E	18 pF Series	Fundamental Fundamental
4.000000	ATS040BSM-1	ATS040BSM-1E	20 pF 18 pF	Fundamental Fundamental	15.000000	ATS1503W-1	ATS150SW-1E	18 pF	Fundamental
4.096000	ATS040B3M-1	ATS042ASM-1E	20 pF	Fundamental	15.360000	ATS150BSM-1	ATS150BSM-1E	20 pF	Fundamental
	ATS042BSM-1	ATS042ASM-1E	18 pF	Fundamental	16.000000	ATS160SM-1	ATS160SM-1E	Series	Fundamental
4.194304	ATS041BSM-1	ATS041BSM-1E	18 pF	Fundamental	16.000000	ATS16ASM-1	ATS16ASM-1E	20 pF	Fundamental
4.194304	ATS041CSM-1	ATS041CSM-1E	12 pF	Fundamental	16.000000	ATS16BSM-1	ATS16BSM-1E	18 pF	Fundamental
	ATS049ASM-1	ATS049ASM-1E	Series	Fundamental	16.384000	ATS164BSM-1	ATS164BSM-1E	18 pF	Fundamental
4.915200	ATS042SM-1	ATS042SM-1E	20 pF	Fundamental	16.934400	ATS169SM-1	ATS169SM-1E	20 pF	Fundamental
4.915200	ATS049BSM-1	ATS049BSM-1E	18 pF	Fundamental	18.432000	ATS184SM-1	ATS184SM-1E	Series	Fundamental
5.000000	ATS050CSM-1	ATS050CSM-1E	Series	Fundamental	18.432000	ATS18ASM-1	ATS18ASM-1E	20 pF	Fundamental
5.000000	ATS050ASM-1	ATS050ASM-1E	20 pF	Fundamental	18.432000	ATS184BSM-1	ATS184BSM-1E	18 pF	Fundamental
5.000000	ATS050BSM-1	ATS050BSM-1E	18 pF	Fundamental	19.660800	ATS196SM-1	ATS196SM-1E	Series	Fundamental
5.068800	ATS051SM-1	ATS051SM-1E	Series	Fundamental	19.660800	ATS19ASM-1	ATS19ASM-1E	20 pF	Fundamental
5.068800	ATS050SM-1	ATS050SM-1E	20 pF	Fundamental	19.660800	ATS196BSM-1	ATS196BSM-1E	18 pF	Fundamental
6.000000	ATS060ASM-1	ATS060ASM-1E	Series	Fundamental	20.000000	ATS200SM-1	ATS200SM-1E	Series	Fundamental
6.000000	ATS060SM-1	ATS060SM-1E	20 pF	Fundamental	20.000000	ATS20ASM-1	ATS20ASM-1E	20 pF	Fundamental
6.000000	ATSO/OCSM 1	ATSOCOGEM 1E	18 pF	Fundamental	20.000000	ATS200CSM-1	ATS200CSM-1E	18 pF	Fundamental
6.000000 6.144000	ATS060CSM-1 ATS061SM-1	ATS060CSM-1E ATS061SM-1E	32 pF 20 pF	Fundamental Fundamental	20.000000 20.480000	ATS20BSM-1	ATS20BSM-1E ATS204SM-1E	50 pF 20 pF	Fundamental Fundamental
6.144000		ATS061BSM1E	18 pF	Fundamental	22.118400	ATS204SM-1 ATS22ASM-1	ATS22ASM-1E	20 pF 20 pF	Fundamental
6.144000	ATS061CSM-1	ATS061CSM-1E	32 pF	Fundamental	22.118400	ATS22ASW-1 ATS221BSM-1	ATS22ASW-1E	18 pF	Fundamental
7.372800	ATS073ASM-1	ATS073ASM-1E	Series	Fundamental	22.579200	ATS225BSM-1	ATS225BSM-1E	18 pF	Fundamental
7.372800	ATS073SM-1	ATS073SM-1E	20 pF	Fundamental	24.000000	ATS240SM-1	ATS240SM-1E	Series	Fundamental
7.372800	ATS073BSM-1	ATS073BSM-1E	18 pF	Fundamental	24.000000	ATS24ASM-1	ATS24ASM-1E	20 pF	Fundamental
8.000000	ATS080SM-1	ATS080SM-1E	Series	Fundamental	24.000000	ATS240BSM-1	ATS240BSM-1E	18 pF	Fundamental
8.000000	ATS08ASM-1	ATS08ASM-1E	20 pF	Fundamental	24.000000	ATS240CSM-1	ATS240CSM-1E	12 pF	Fundamental
8.000000	ATS080BSM-1	ATS080BSM-1E	18 pF	Fundamental	24.576000	ATS245SM-1	ATS245SM-1E	Series	Fundamental
8.000000	ATS080CSM-1	ATS080CSM-1E	32 pF	Fundamental	24.576000	ATS24BSM-1	ATS24BSM-1E	20 pF	Fundamental
8.192000	ATS081BSM-1	ATS081BSM-1E	18 pF	Fundamental	24.576000	ATS245ASM-1	ATS245ASM-1E	18 pF	Fundamental
9.830400	ATS099SM-1	ATS099SM-1E	Series	Fundamental	25.000000	ATS250SM-1	ATS250SM-1E	Series	Fundamental
9.830400	ATS098SM-1	ATS098SM-1E	20 pF	Fundamental	25.000000	ATS25ASM-1	ATS25ASM-1E	20 pF	Fundamental
9.830400	ATS098BSM-1	ATS098BSM-1E	18 pF	Fundamental	25.000000	ATS250BSM-1	ATS250BSM-1E	18 pF	Fundamental
10.000000 10.000000	ATS100SM-1 ATS10ASM-1	ATS100SM-1E ATS10ASM-1E	Series	Fundamental	26.000000	ATS260ASM-1 ATS260BSM-1	ATS260ASM-1E ATS260BSM-1E	20 pF 18 pF	Fundamental
		ATS10ASM-1E	20 pF 18 pF	Fundamental Fundamental		ATS270ASM-1	ATS270ASM-1E	20 pF	Fundamental Fundamental
	ATS111ASM-1	ATS111ASM-1E	Series	Fundamental	27.000000	ATS270BSM-1	ATS270ASM-1E	18 pF	Fundamental
	ATS111SM-1	ATS111ASW-1E	20 pF	Fundamental	28.636360	ATS286ASM-1	ATS286ASM-1E	20 pF	Fundamental
		ATS111BSM-1E	18 pF	Fundamental		ATS300ASM-1	ATS300ASM-1E	20 pF	Fundamental
	ATS111CSM-1	ATS111CSM-1E	32 pF	Fundamental	30.000000	ATS300BSM-1	ATS300BSM-1E	18 pF	Fundamental
	ATS120SM-1	ATS120SM-1E	Series	Fundamental	32.000000	ATS320SM-1	ATS320SM-1E	Series	3rd Overtone
	ATS12ASM-1	ATS12ASM-1E	20 pF	Fundamental		ATS32ASM-1	ATS32ASM-1E	20 pF	3rd Overtone
12.000000	ATS120BSM-1	ATS120BSM-1E	18 pF	Fundamental	32.000000	ATS320BSM-1	ATS320BSM-1E	18 pF	3rd Overtone
	ATS120CSM-1	ATS120CSM-1E	32 pF	Fundamental	33.000000	ATS330ASM-1	ATS330ASM-1E	20 pF	3rd Overtone
	ATS125SM-1	ATS125SM-1E	Series	Fundamental		ATS330BSM-1	ATS330BSM-1E	18 pF	3rd Overtone
	ATS122SM-1	ATS122SM-1E	20 pF	Fundamental	36.000000	ATS360ASM-1	ATS360ASM-1E	20 pF	3rd Overtone
12.288000		ATS122BSM-1E	18 pF	Fundamental	36.000000	ATS360BSM-1	ATS360BSM-1E	18 pF	3rd Overtone
	ATS123SM-1	ATS123SM-1E	Series	Fundamental		ATS400SM-1	ATS400SM-1E	Series	3rd Overtone
	ATS124SM-1	ATS124SM-1E	20 pF	Fundamental		ATS40ASM-1	ATS40ASM-1E	20 pF	3rd Overtone
	ATS127SM-1 ATS126SM-1	ATS127SM-1E	Series	Fundamental Fundamental	40.000000 48.000000	ATS400BSM-1 ATS480ASM-1	ATS400BSM-1E ATS480ASM-1E	18 pF	3rd Overtone 3rd Overtone
		ATS126SM-1E ATS125BSM-1E	20 pF 18 pF	Fundamental	48.000000	ATS480BSM-1	ATS480ASM-1E	20 pF 18 pF	3rd Overtone
	ATS125BSW-1	ATS125BSW-1E ATS130SM-1E	20 pF	Fundamental	60.000000	ATS600ASM-1	ATS600ASM-1E	20 pF	3rd Overtone
	ATS135SM-1	ATS1305M-1E	20 pF	Fundamental	60.000000	ATS600BSM-1	ATS600BSM-1E	18 pF	3rd Overtone
		ATS1355MF1E ATS135BSM-1E	18 pF	Fundamental	64.000000	ATS640ASM-1	ATS640ASM-1E	20 pF	3rd Overtone
	ATS140BSM-1	ATS140BSM-1E	18 pF	Fundamental	64.000000	ATS640BSM-1	ATS640BSM-1E	18 pF	3rd Overtone
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ELECTRICAL CHARACTERISTICS

	PARAMETER	VALUE		
	Frequency Range	3.2 MHz to 64.0 MHz		
	Operating Mode	Fundamental or 3rd Overtone		
S	Crystal Cut	AT-Cut		
ER	Frequency Tolerance @ +25°C	± 30 ppm Standard *		
MET	Frequency Stability Tolerance (Operating Temperature Range, Referenced to 25°C Reading)	± 50 ppm Standard *		
PARAMET	Operating Temperature Range	-20°C to +70°C * -40°C to +85°C Available, See Ordering Information		
AL.	Equivalent Series Resistance	See ESR Table		
2	Load Capacitance or Resonance Mode	See Standard Part Numbers tables *		
TR	Shunt Capacitance (C ₀)	7.0 pF Maximum		
<u>ان</u>	Drive Level	100 μW Typical, 1,000 μW Maximum		
ᆸ	Aging @ +25°C	±3 ppm/yr Typical, ±5 ppm/yr Maximum		
	Insulation Resistance	500 Ohms @ DC 100V		
	Storage Temperature Range	-40°C to +85°C		
	Reflow Condition, per JEDEC J-STD-020	+260°C Maximum, 10 Seconds Maximum		

^{*} Custom requirements may be available upon request.

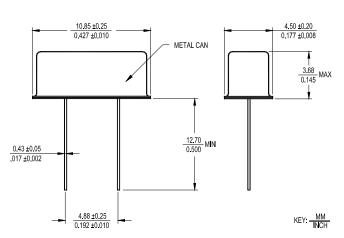
EQUIVALENT SERIES RESISTANCE TABLE

FREQUENCY RANGE	OSCILLATION MODE	ESR MAXIMUM
3.20 MHz - < 4.00 MHz	Fundamental	150 Ohms
4.00 MHz - < 5.00 MHz	Fundamental	120 Ohms
5.00 MHz - < 8.00 MHz	Fundamental	80 Ohms
8.00 MHz - < 12.00 MHz	Fundamental	60 Ohms
12.00 MHz - < 20.00 MHz	Fundamental	40 Ohms
20.00 MHz - < 30.00 MHz	Fundamental	30 Ohms
27.00 MHz - 64.00 MHz	3rd Overtone	80 Ohms



ATS PACKAGE DRAWING





MARKING INFORMATION

- 1. ATSXXXX CTS Part Number.
 - a) The package code "1" is not required in the marking.
 - b) The –E is required in the marking for extended temperature range parts.

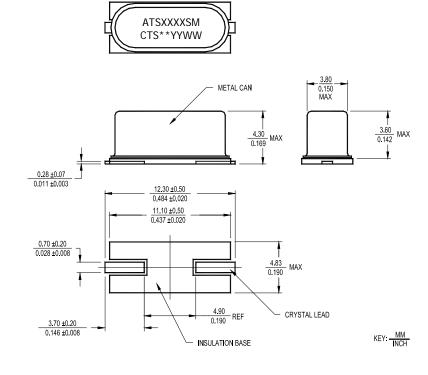
[See Standard Product Part Numbers tables.]

- 2. ** Manufacturing Site Code.
- 3. YYWW Date Code, YY year, WW week.
- Complete CTS part number, frequency value and date code information must appear on bag and box labels.

NOTES

- 1. Lead finish (e1), SnAgCu.
- $2. \quad MSL = 1.$

ATS-SM PACKAGE DRAWING



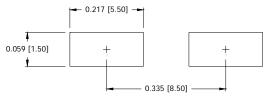
MARKING INFORMATION

- 1. ATSXXXXXSM CTS Part Number.
 - a) The package code "1" is not required in the marking.
 - b) The –E is required in the marking for extended temperature range parts.
 [See Standard Product Part Numbers tables.]
- 2. ** Manufacturing Site Code.
- 3. YYWW Date Code, YY year, WW week.
- Complete CTS part number, frequency value and date code information must appear on bag and box labels.

NOTES

- 1. Lead finish (e1), SnAgCu.
- 2. MSL = 1.

SUGGESTED SOLDER PAD GEOMETRY

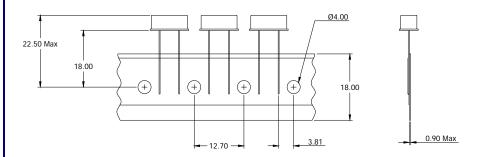




PACKAGING INFORMATION

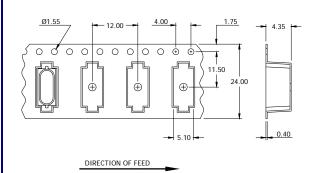
ATS Radial Taping (Ammopak)

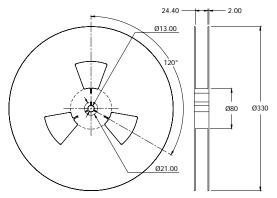
DIMENSIONS IN MILLIMETERS



ATS-SM Tape and Reel

DIMENSIONS IN MILLIMETERS





Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

CTS:

ATS036 ATS036SM ATS036SM-1 ATS037 ATS037SM ATS037SM-1 ATS040 ATS040SM ATS040SM-1
ATS042 ATS042SM ATS042SM-1 ATS050 ATS050SM ATS050SM-1 ATS060 ATS060SM ATS060SM-1 ATS08A
ATS08ASM ATS08ASM-1 ATS098 ATS098SM ATS098SM-1 ATS100 ATS100SM ATS100SM-1 ATS111
ATS111SM ATS111SM-1 ATS120 ATS120SM ATS120SM-1 ATS122 ATS122SM ATS122SM-1 ATS143
ATS143SM ATS143SM-1 ATS15A ATS15ASM ATS15ASM-1 ATS160 ATS160SM ATS160SM-1 ATS16A
ATS200 ATS200SM ATS200SM-1 ATS204 ATS204SM ATS204SM-1 ATS245 ATS245SM ATS245SM-1 ATS250
ATS18ASM-1 ATS22ASM-1 ATS122SM-T ATS15ASM-T ATS204SM-T ATS036B ATS036B-E ATS036BSM-1
ATS036BSM-1E ATS036-E ATS036SM-1E ATS037A ATS037A-E ATS037ASM-1 ATS037ASM-1E ATS037-E
ATS037SM-1E ATS040BSM-E ATS040-E ATS040SM-1E ATS041C ATS041C-E ATS041CSM-1 ATS042BSM-1E
ATS042A ATS042A-E ATS042ASM-1 ATS049A-E ATS049ASM-1 ATS049ASM-1 ATS04A-E
ATS04ASM-1 ATS04ASM-1E ATS050A ATS050A-E