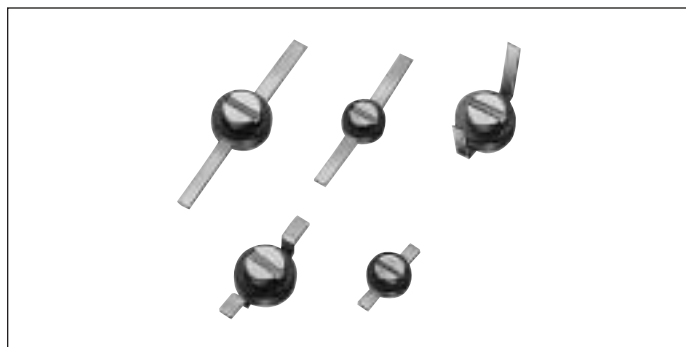


Trimmer Capacitors

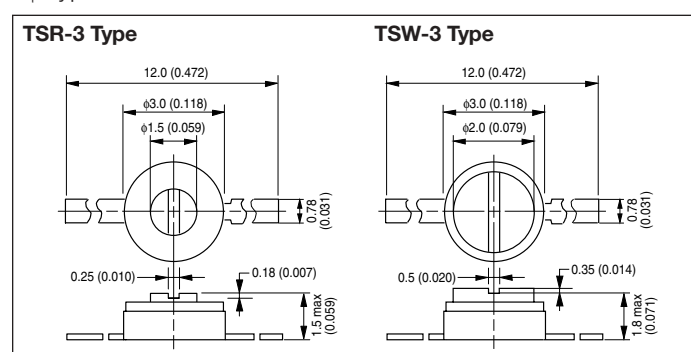


TSR, TSW, TSF Series

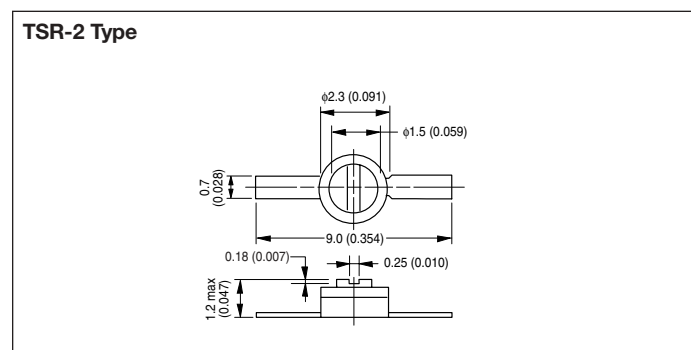


DIMENSIONS

3 ϕ Type



2 ϕ Type



SPECIFICATIONS

Part Number	Capacitance Range Mark	Capacitance Range Mark (pF)	Part Number	Thickness Marking			TC (ppm/°C)	Q Factor (1±0.1MHz)	Slot Dimension
				120	150	180			
TSR3 TSW3	Z	1 to 3	TSW3	—	—	O	NP0±300	TSR3≥150	TSR3 Normal Slot Width = 0.25 Depth = 0.18 TSW3 Wide Slot Width = 0.50 Depth = 0.35
	P	1.5 to 5	TSW3	—	—	O			
	SP	1.5 to 10	TSW3	—	—	O			
	H	2.5 to 10	TSW3	—	—	O			
	S3	5.0 to 20	TSR3	—	O	—	N750±500	TSW3≥200	
			TSW3	—	—	O			
	S2	5.0 to 25	TSR3	—	O	—			
			TSW3	—	—	O			
	S	5.0 to 30	TSR3	—	O	—			
			TSW3	—	—	O			
	□	5.0 to 35	TSR3	—	O	—			
			TSW3	—	—	O			
L	5.0 to 40	TSR3	—	O	—				
		TSW3	—	—	O				
TSF2	L	5.0 to 20	TSF2	O	—	—	N1200±800	TSF2≥100	TSF2 Normal Slot Width = 0.25, Depth = 0.18
	L2	5.0 to 25							

FEATURES

- Ultra small and wide capacitance range
- Small ΔC after alcohol washing
- Better cost performance with Ag plated lead available
- Wide slot type adjustable by using nonconductive trimming driver

APPLICATIONS

- Watch
- Ultra miniature radio
- Telecommunication
- Ultra small video tuner
- Cordless phone
- Pager

HOW TO ORDER

TSR 3 S - 150 - AU

Lead Forming Type

Thickness Dimensions

120	1.2mm	TSF2 Type
150	1.5mm	TSR3 Type
180	1.8mm	TSW3 Type

Capacitance Range

Diameter Indication

3 = 3 ϕ Type 2 = 2 ϕ Type

Series

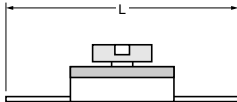
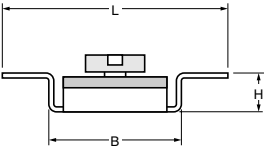
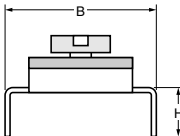
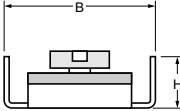
TSR Series
TSF Series
TSW Series

Trimmer Capacitors

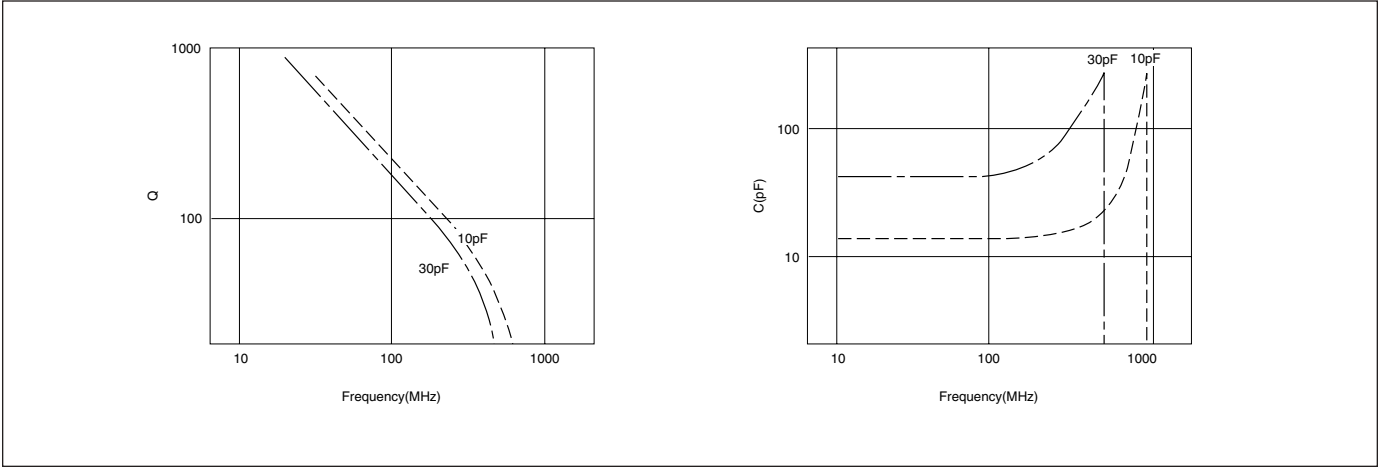


TSR, TSW, TSF Series

LEAD-FORMING TYPE

Series		Dimensions mm (inches)			Configuration
		H	B	L	
Standard Type 	TSF2	—	—	9.0±1.0 (0.354±0.039)	
	TSR3	—	—	12.0±1.0 (0.472±0.039)	
	TSW3	—	—	12.0±1.0 (0.472±0.039)	
HB Type 	TSF2	0.35±0.2 (0.014±0.008)	2.85±0.3 (0.112±0.012)	4.80±0.3 (0.189±0.012)	
AB Type 	TSW3	3.65±0.5 (0.144±0.020)	5.0±0.5 (0.197±0.020)	—	
AU Type 	TSW3	3.65±0.5 (0.144±0.020)	5.0±0.5 (0.197±0.020)	—	

CHARACTERISTICS

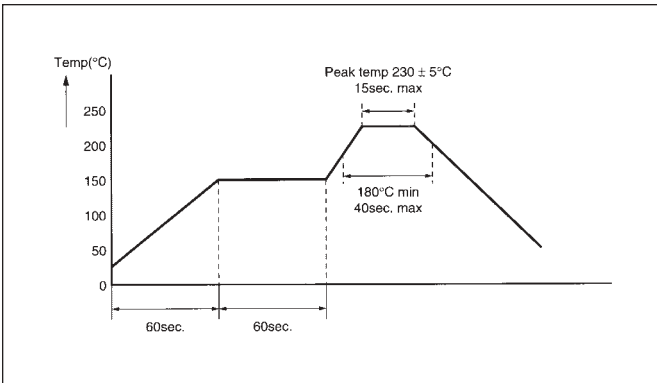


PCB MOUNTING

- Please use mounting hole suitable for lead dimension of trimmer capacitor.
- When our recommended land pattern is not used, please check mounting alignment.
- When mounting on PCB, please do not apply pressure to trimmer capacitors over 500g.f.

SOLDERING

- When using soldering iron, adjust iron tip to 280°C.
- Please find below recommended solder profile.



STORAGE CONDITIONS

- Please do not store chlorine and sulfides in same atmosphere.
- Storage life 6 months.

SCREWDRIVERS

Please use proper screwdriver for adjustment of the capacitor. Kyocera can supply suitable ceramic type screwdrivers specially designed for the use of CTZ series. Please contact your local AVX office for the details.

CTZ-3

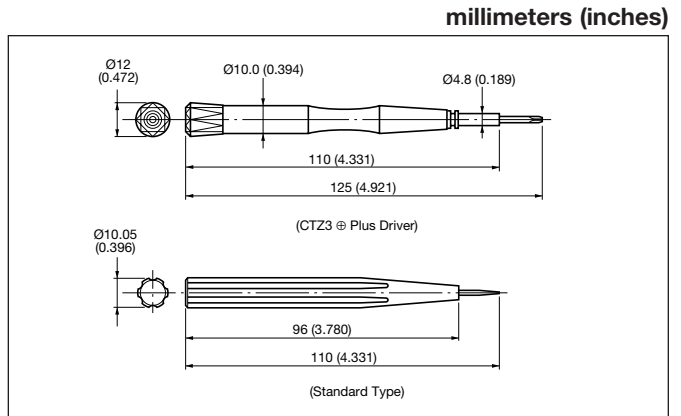
Pin Head

- ⊕ = CTZ-3 Plus Ceramic Driver
- ⊖ = CTZ-3 Minus Ceramic Driver

CTZ-2

Pin Head

- ⊕ = CTZ-2 Plus Ceramic Driver
- ⊖ = CTZ-2 Minus Ceramic Driver



DRIVER HEAD TYPE

CTZ3 Plus Technical drawing of the CTZ3 Plus driver head. The side view shows a tapered shaft with a total length of 3.60 (0.142) and a tip diameter of 1.2 (0.047). The cross-sectional view shows a central hole with a diameter of 0.35 (0.014) and a total width of 1.30 (0.051). The outer diameter at the base is 2.6 (0.102).	CTZ2 Plus Technical drawing of the CTZ2 Plus driver head. The side view shows a tapered shaft with a total length of 2.0 (0.079) and a tip radius of R1.2 (0.047). The cross-sectional view shows a central hole with a diameter of 0.19 (0.007) and a total width of 0.85 (0.033). The outer diameter at the base is 1.6 (0.063).
CTZ3 Minus Technical drawing of the CTZ3 Minus driver head. The side view shows a tapered shaft with a total length of 7.0 (0.276) and a tip diameter of 0.40 (0.016). The cross-sectional view shows a central hole with a diameter of 0.19 (0.007) and a total width of 0.85 (0.033). The outer diameter at the base is 2.20 (0.087).	CTZ2 Minus Technical drawing of the CTZ2 Minus driver head. The side view shows a tapered shaft with a total length of 3.5 (0.138) and a tip radius of R1.2 (0.047). The cross-sectional view shows a central hole with a diameter of 0.19 (0.007) and a total width of 0.85 (0.033). The outer diameter at the base is 1.6 (0.063).

Mouser Electronics

Authorized Distributor

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