

Cermet Trimmers, Surface Mount, 4.0 mm Square, Single Turn, Industrial Grade



FEATURES

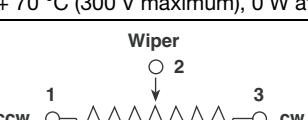
- 0.25 W at 70 °C
 - Fully sealed to withstand board washing
 - Compatible with popular vacuum pick-and-place equipment
 - J-hook and gull-wing configurations
 - Material categorization: For definitions of compliance please see www.vishay.com/doc?99912



**RoHS
COMPLIANT**

DIMENSIONS in millimeters (inches) ± 0.25 mm (± 0.010 ")

ELECTRICAL SPECIFICATIONS

Resistance Range	10 Ω to 2 M Ω (see Standard Resistance table)
Tolerance	$\pm 20\%$ standard
End Resistance	1 % or 2 Ω maximum, whichever is greater
Temperature Coefficient	$\pm 100 \text{ ppm}/^\circ\text{C}$
Power Rating	0.25 W at + 70 $^\circ\text{C}$ (300 V maximum), 0 W at + 125 $^\circ\text{C}$
Circuit Diagram	
Contact Resistance Variation (CRV)	1 % or 3 Ω
Resolution	Infinite
Insulation Resistance (500 V_{DC})	100 M Ω minimum
Dielectric Strength (RMS)	Sea level 500 V _{AC} (1 minute)
Adjustment Angle	210° nominal

MECHANICAL SPECIFICATIONS

Mechanical Angle	240° nominal
Operating Torque (Typical)	1.8 Ncm
End Stop Torque (Typical)	3.0 Ncm
Weight	Approximately 0.01 oz.
Wiper	Positioned at approx. 50 %

ENVIRONMENTAL SPECIFICATIONS

Temperature Range	- 55 °C to + 125 °C
MSL Level	1

PERFORMANCES

TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS		
		$\Delta R_T/R_T$ (%)	$\Delta V_{1-2}/V_{1-3}$ (%)	OTHER
Vibration	20 g's	± 1 %	± 1 %	-
Shock	100 g's	± 1 %	± 1 %	-
Electrical Endurance	At 70 °C rated power 1000 h	± 3 %	-	-
Mechanical Endurance	100 cycles	± 3 %	-	-
Change of Temperature	5 cycles	± 2 %	± 1 %	-
Humidity	90 % to 98 % relative humidity 10 cycles, 240 h	± 2 %	-	Insulation resistance: 10 MΩ

SOLDERING RECOMMENDATIONS

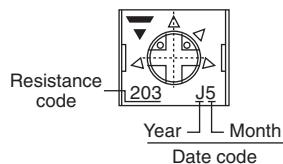
Recommended reflow profile 2, see Application Note www.vishay.com/doc?52029

TWO DIGIT DATE CODE					
YEAR					
1990	A	2000	M	2010	A
1991	B	2001	N	2011	B
1992	C	2002	P	2012	C
1993	D	2003	R	2013	D
1994	E	2004	S	2014	E
1995	F	2005	T	2015	F
1996	H	2006	U	2016	H
1997	J	2007	V	2017	J
1998	K	2008	W	2018	K
1999	L	2009	X	2019	L
MONTH					
January	1	July	7		
February	2	August	8		
March	3	September	9		
April	4	October	0		
May	5	November	N		
June	6	December	D		

STANDARD RESISTANCE ELEMENT DATA		
RESISTANCE Ω	RESISTANCE CODE	TYPICAL TCR (ppm/°C)
10	100	
20	200	
50	500	
100	101	
200	201	
500	501	
1K	102	
2K	202	
5K	502	± 100
10K	103	
20K	203	
50K	503	
100K	104	
200K	204	
500K	504	
1M	105	
2M	205	

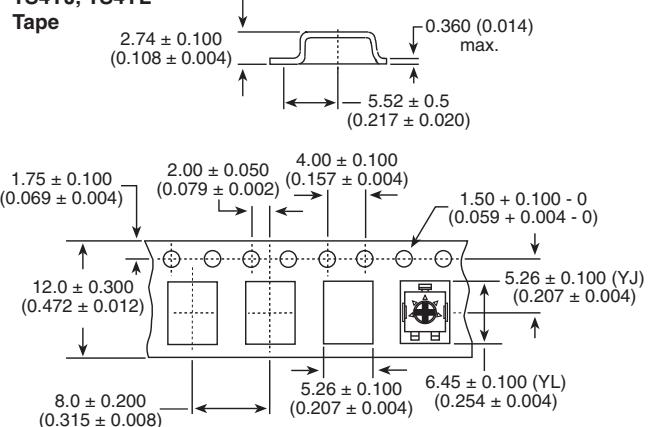
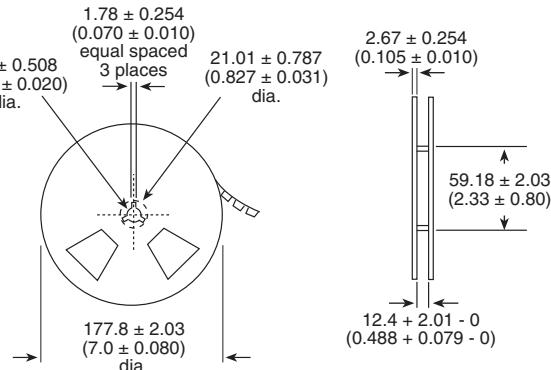
Note

- Special resistance available

PART MARKING


- Manufacturers code
- Resistance code
- Date code

PACKAGING in millimeters (inches)

TS4YJ, TS4YL

TS4YJ, TS4YL
Reel

ORDERING INFORMATION (Part Number)

T	S	4	Y	L	5	0	2	M	R	1	0	 	
MODEL		STYLE		OHMIC VALUE		TOLERANCE		PACKAGING		SPECIAL NUMBER			
TS4		YJ YL		From 10 Ω to 2 M Ω 502 = 5 k Ω		M = \pm 20 %		R10 = Reel 500 pieces		(If applicable) Given by Vishay for custom design			

DESCRIPTION (for information only)

TS4	YL	5K	20 %		TR	e3
MODEL	STYLE	VALUE	TOLERANCE	SPECIAL	PACKAGING	LEAD FINISH

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Mouser Electronics

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