

# 3 mm Square Surface Mount Miniature Trimmer Single-Turn Cermet Sealed



## FEATURES

- 0.125 W at 70 °C
- Small size for optimum packaging density
- Suitable for both manual and automatic operations
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



RoHS  
COMPLIANT

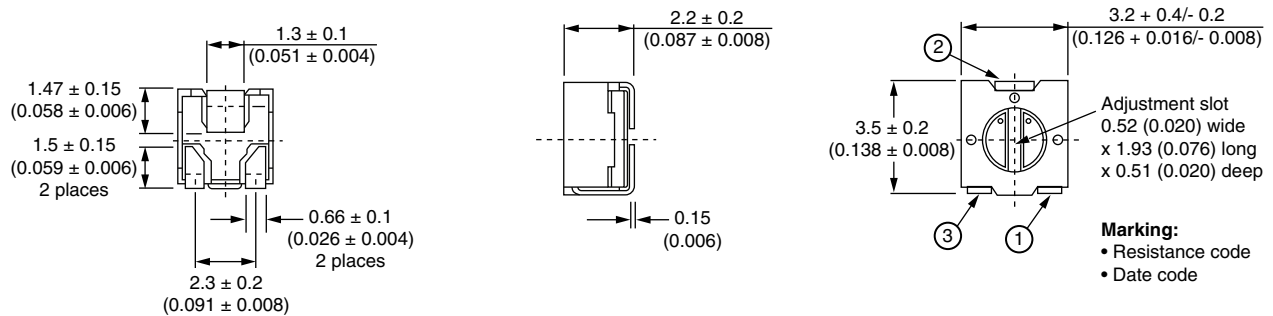
## DESIGN SUPPORT TOOLS

[click logo to get started](#)

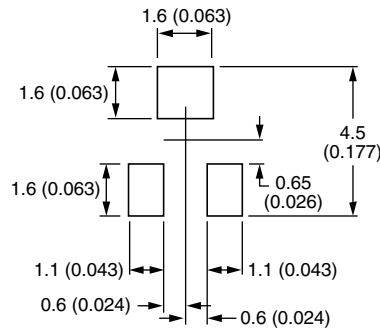
**3D**  
Models  
Available

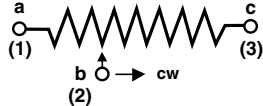
## DIMENSIONS in millimeters (inches) ± 0.25 mm (± 0.010")

TS3YJ



## RECOMMENDED SOLDERING AREAS



ELECTRICAL SPECIFICATIONS	
Resistive element	Cermet
Electrical travel	220°
Resistance range	10 Ω to 2 MΩ
Stocked range	1 kΩ to 100 kΩ
Standard series	1 - 2 - 5
Tolerance standard	± 20 %
Circuit diagram	
Power rating	0.125 W at 70 °C
Temperature coefficient (max.)	≤ 100 Ω ± 150 ppm/°C / > 100 Ω ± 100 ppm/°C
Limiting element voltage (max.)	200 V
Contact resistance variation	3 % or 3 Ω
End resistance	1 % or 3 Ω
Dielectric strength (RMS)	500 V (sea level)
Insulation resistance (500 V <sub>DC</sub> )	100 MΩ

MECHANICAL SPECIFICATIONS	
Mechanical travel	250°
Operating torque (max. Ncm)	0.5
End stop torque (min. Ncm)	2
Unit weight (max. g)	0.1
Mechanical life (cycles)	50

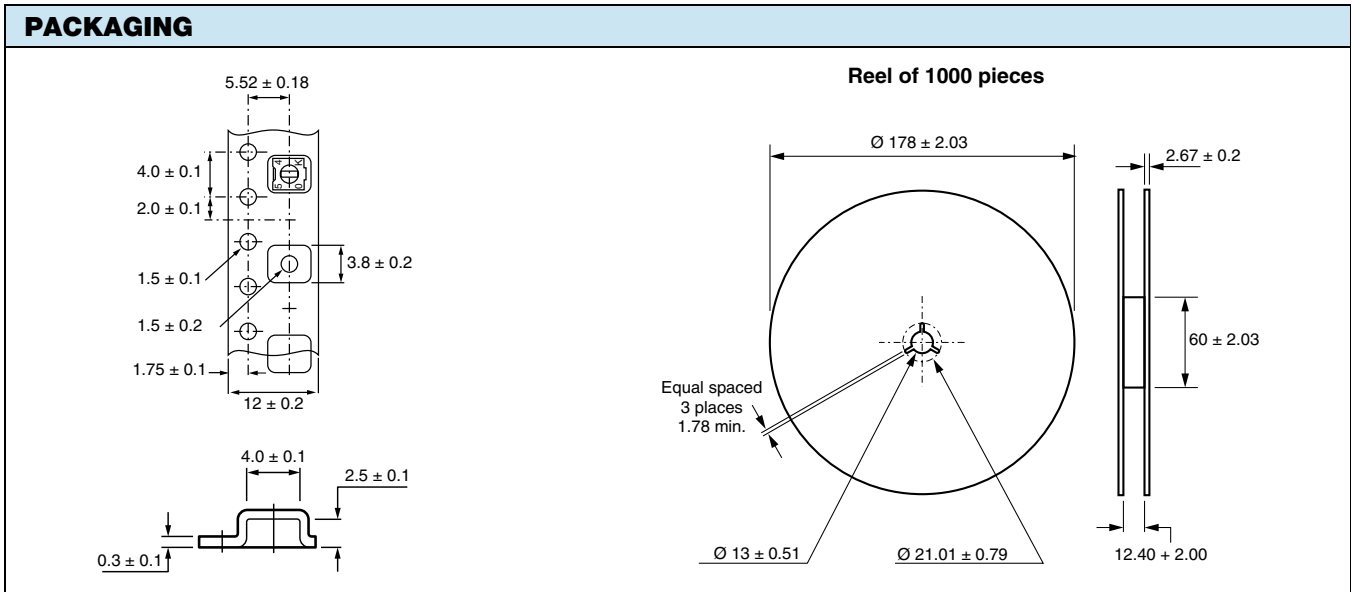
**Note**

- Nothing stated herein shall be construed as a guarantee of quality or durability

ENVIRONMENTAL SPECIFICATIONS	
Temperature range	-55 °C to +125 °C
Sealing	Sealed container IP67
MSL level	1

SOLDERING RECOMMENDATIONS	
Recommended reflow profile 2, see Application Note <a href="http://www.vishay.com/doc?52029">www.vishay.com/doc?52029</a>	

STANDARD RESISTANCE ELEMENT DATA		
RESISTANCE	PART MARKING CODE	RESISTANCE CODE
10	A1	100
20	21	200
50	51	500
100	A2	101
200	22	201
500	52	501
1K	A3	102
2K	23	202
5K	53	502
10K	A4	103
20K	24	203
50K	54	503
100K	A5	104
200K	25	204
500K	55	504
1M	A6	105
2M	26	205



**ORDERING INFORMATION** (part number)

T	S	3	Y	J	5	0	3	M	R	1	5				
MODEL		STYLE			OHMIC VALUE			TOLERANCE		PACKAGING			SPECIAL NUMBER		
TS3		YJ			From 10 Ω to 2 MΩ 503 = 50 kΩ			M = ± 20 %		R15 = reel 1000 pieces			(if applicable) given by Vishay for custom design		

**DESCRIPTION** (for information only)

TS3	YJ	50K	20 %		TR	e3
MODEL	STYLE	VALUE	TOLERANCE	SPECIAL	PACKAGING	LEAD FINISH

**RELATED DOCUMENTS**

<b>APPLICATION NOTES</b>	
Potentiometers and Trimmers	<a href="http://www.vishay.com/doc?51001">www.vishay.com/doc?51001</a>
Guidelines for Vishay Sfernice Resistive and Inductive Components	<a href="http://www.vishay.com/doc?52029">www.vishay.com/doc?52029</a>



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