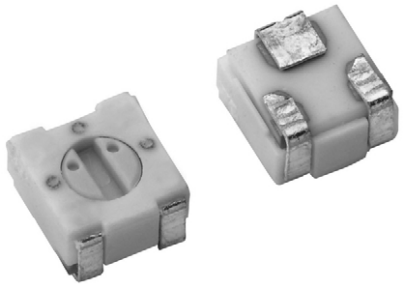
3 mm Square Surface Mount Miniature Trimmer Single-Turn Cermet Sealed



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

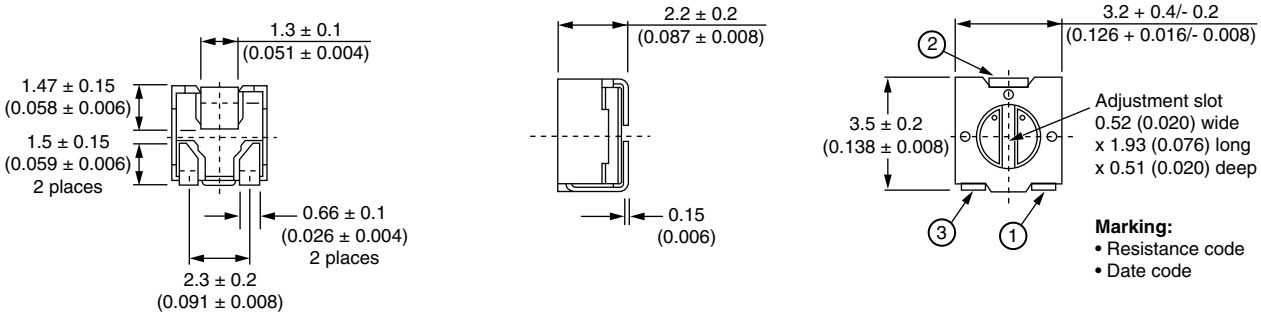
RoHS COMPLIANT

LINKS TO ADDITIONAL RESOURCES

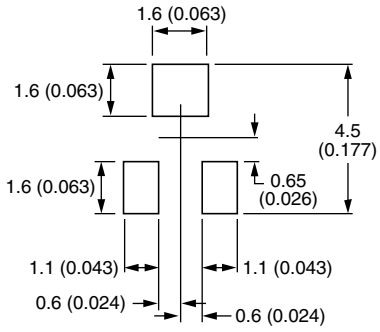
3D Models

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

TS3YJ

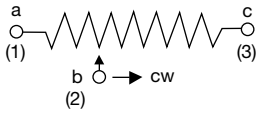


RECOMMENDED SOLDERING AREAS



For technical questions, contact: sferpottrimmers@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

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_{DC})	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

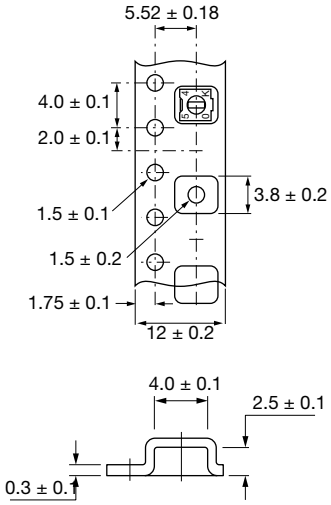
SOLDERING RECOMMENDATIONS
Recommended reflow profile 2, see Application Note www.vishay.com/doc?52029

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

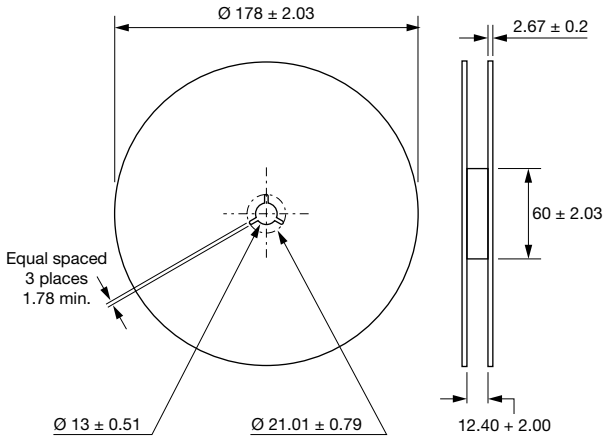
For technical questions, contact: sferpottrimmers@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

PACKAGING



Tape and reel of 1000 pieces



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** = tape and 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

APPLICATION NOTES	
Potentiometers and Trimmers	www.vishay.com/doc?51001
Guidelines for Vishay Sfernice Resistive and Inductive Components	www.vishay.com/doc?52029

For technical questions, contact: sferpottrimmers@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, “Vishay”), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

© 2025 VISHAY INTERTECHNOLOGY, INC. ALL RIGHTS RESERVED

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000