

4mm Surface Mount Cermet Trimmers



FEATURES

4H Open Frame

- The 4H Series Terminations have Excellent Solder Wetability as well as High Solder Leaching Resistance with its Nickel Barrier Layer Construction
- Excellent Solder Heat Resistance Achieved with Nickel Barrier Structure of Terminals
- Also Available in Other Styles: 3 Terminals in Line, Rear Adjust, 2 Terminal, Auto Adjust. Details Upon Application

4M Sealed

- Miniature, Superthin (4.7 x 4.0 x 2.0mm)
- Suitable For Flow and Reflow Soldering
- High Reliability
- Sealed to Withstand Immersion Cleaning Process
- No Cleaning Process is Necessary after Soldering

ELECTRICAL SPECIFICATIONS

PARAMETER	4H	4M
Resistance Range	100Ω - 2MΩ	200Ω - 2MΩ
Resistance Tolerance	± 25%	± 25%
Power Rating	0.1W @ 70°C	0.1W @ 70°C
Maximum Working Voltage	50VDC	50VDC
Effective Rotational Angle	270°C ± 10°	240°C ± 10°

MECHANICAL SPECIFICATIONS

PARAMETER	
Operating Temperature Range	- 55°C to + 125°C
Rotational Torque	2.0 - 24.5mNm (20 - 250g/cm)

ORDERING INFORMATION

(Supplied on tape and reel: 500 Pieces per reel)

4H
MODEL
4H, 4M

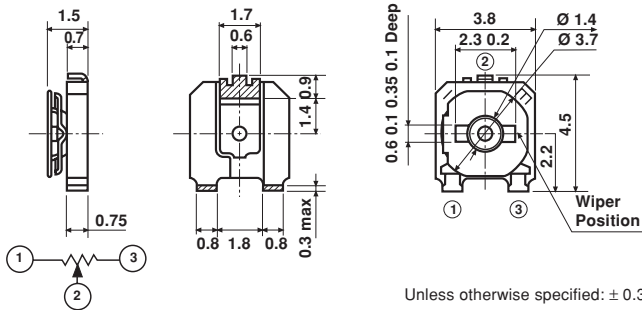
XXX
RESISTANCE VALUE
EIA Code

Example: 4H - XXX



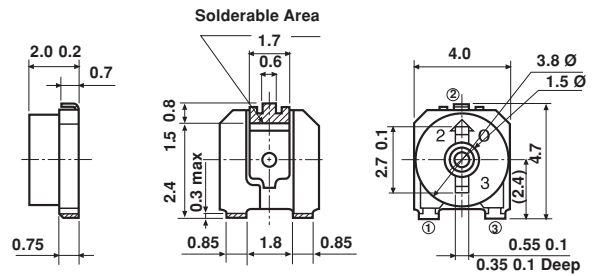
DIMENSIONS (millimeters)

4H

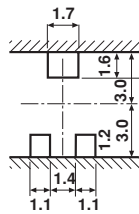


Unless otherwise specified: ± 0.3

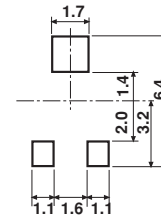
4M



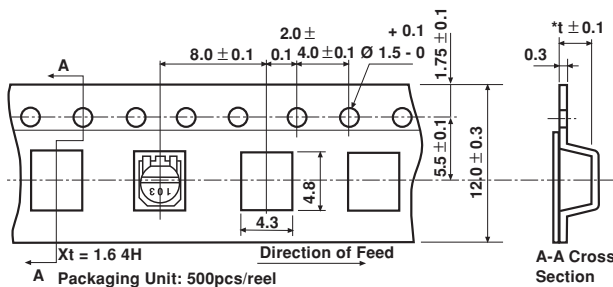
PCB LAYOUT



PCB LAYOUT

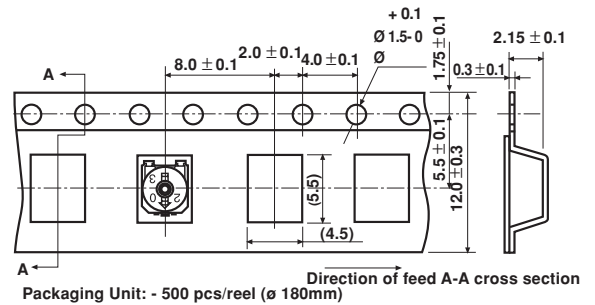


TAPE SPEC

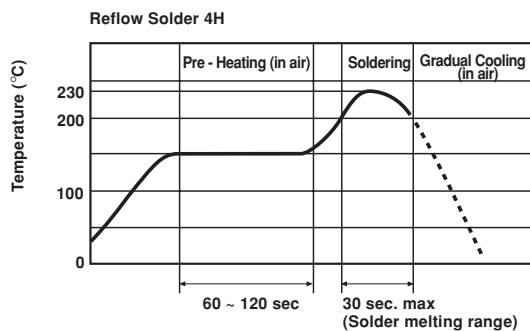


UNLESS OTHERWISE SPECIFIED ± 0.3

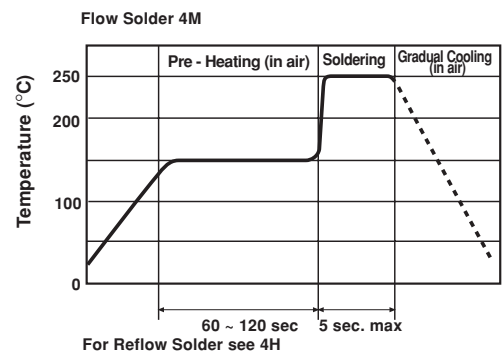
TAPE SPEC



SOLDERING CONDITIONS



SOLDERING CONDITIONS





ENVIRONMENTAL SPECIFICATIONS		
PARAMETER	4H	4M
Humidity Exposure	± 3%	± 3%
Load Life	± 3%	± 3%
High Temperature Exposure	± 3%	–
Humidity Load Life	± 3%	–
Temperature Cycle	± 3%	± 3%
Temperature Coefficient of Resistance	± 250ppm/°C	± 250ppm/°C
Rotational Life	± 10% (20 Cycle)	± 10%
Hand Soldering	4H and 4M The following conditions must be strictly obeyed when using a soldering iron	
Tip Temperature	260° maximum	260° maximum
Tip Diameter	ø 3mm maximum	–
Soldering Iron	30W maximum	30W maximum
Soldering Time	3 sec maximum	3 sec maximum

Caution

Care should be taken with amount of solder, too little may lower PCB adhesion strength, whilst too much may cause solder bridge between terminations. Be careful of inflow of solder to the rear staking portion of centre axis.

4H series are not suitable for flow soldering because of open frame construction.

4H series has no mechanical stop. Rotate wiper within specified range.

Cleaning Conditions

At a temperature of $25 \pm 10^\circ\text{C}$ immersion cleaning within minutes. Ultrasonic cleaning should be completed within 1 minute. When combining ultrasonic cleaning and immersion washing, set the total time within 2 minutes.

RESISTANCE VALUES		
Ohms	4H	100R, 200R, 500R, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 200K, 500K, 1M, 2M
	4M	200R, 500R, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 200K, 500K, 1M, 2M

MARKING	
Unit Identification	IEC resistance value coding.