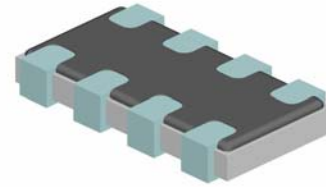


Specification Status: Released

Not to be used for new designs. For new design please contact Tyco Electronics Sales

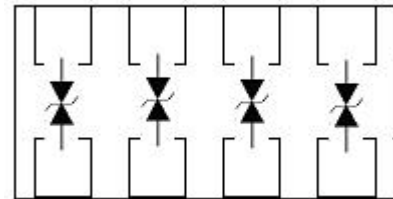
BENEFITS

- Suitable for high speed data transmission applications
- Board space savings
- Help to protect sensitive electronic circuits against damage from electrostatic discharge (ESD) events
- Assist equipment to pass IEC 61000-4-2, level 4 testing



FEATURES

- Thick film technology
- Low capacitance (0.25 pF typical)
- Low clamping voltage
- Capable of withstanding numerous ESD strikes
- Compatible with standard reflow installation procedures
- Bi-directional protection



APPLICATIONS

- Cellular Phones

Caution: This part is not intended to be used under bias, nor for application with a power bus.

MATERIALS INFORMATION

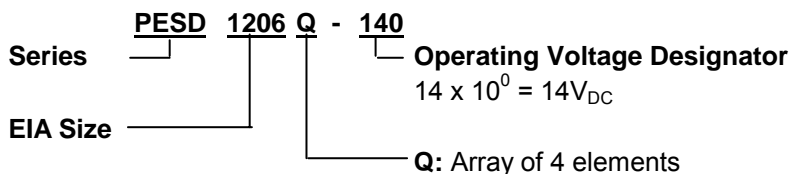
ROHS Compliant

Directive 2002/95/EC
Compliant

ELV Compliant

Directive 2000/53/EC
Compliant

PART NUMBERING



The operating voltage is used to measure leakage current @ 1s

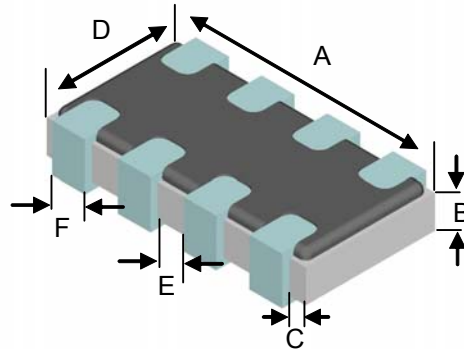
ESD Protector Overvoltage Protection Device

Raychem Circuit Protection Products

PRODUCT: PESD1206Q-140

DOCUMENT: SCD 26108
REV LETTER: I
REV DATE: DECEMBER 7, 2007
PAGE NO.: 3 OF 6

DIMENSIONS



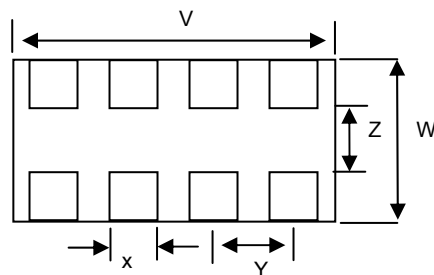
Drawing Not To Scale

| Length A | | Height B | | End Terminal Width C | | Width D | | Width E | | Width F | | |
|----------|---------|----------|---------|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | |
| mm: | 3.0 | 3.4 | 0.4 | 0.6 | 0.1 | 0.3 | 1.4 | 1.8 | 0.2 | 0.6 | 0.2 | 0.6 |
| in*: | (0.118) | (0.134) | (0.016) | (0.024) | (0.004) | (0.012) | (0.055) | (0.071) | (0.008) | (0.024) | (0.008) | (0.024) |

*Rounded off approximation

RECOMMENDED LAND PATTERN:

Solder thickness 0.15 to 0.2mm

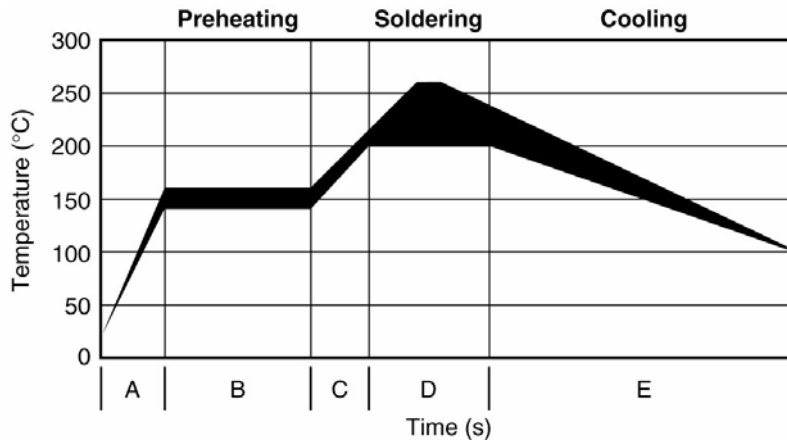


| | V Ref | W Ref | X Ref | Y Ref | Z Ref |
|------|--------------------|--------------------|--------------------|--------------------|--------------------|
| mm: | 3.2 ± 0.2 | 2.2 ± 0.2 | 0.50 ± 0.1 | 0.8 ± 0.2 | 1.0 ± 0.1 |
| in*: | (0.13 ± 0.008) | (0.10 ± 0.008) | (0.02 ± 0.004) | (0.03 ± 0.008) | (0.04 ± 0.004) |

*Rounded off approximation.

SOLDER REFLOW RECOMMENDATIONS:

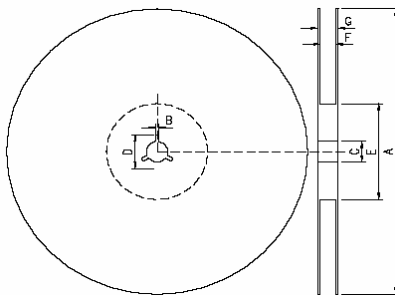
| | | | |
|---|-----------------------|--|---|
| A | Temperature ramp up 1 | From ambient to Preheating temperature | 30s to 60s |
| B | Preheating | 140°C - 160°C | 60s to 120s |
| C | Temperature ramp up 2 | From Preheating to Main heating temperature | 20s to 40s |
| D | Main heating | at 200°C at 220°C at 240°C at 260°C | 60s ~ 70s 50s ~ 60s 30s ~ 40s 5s ~ 10s |
| E | Cooling | From main heating temperature to 100°C | max 4°C/s |



PACKAGING

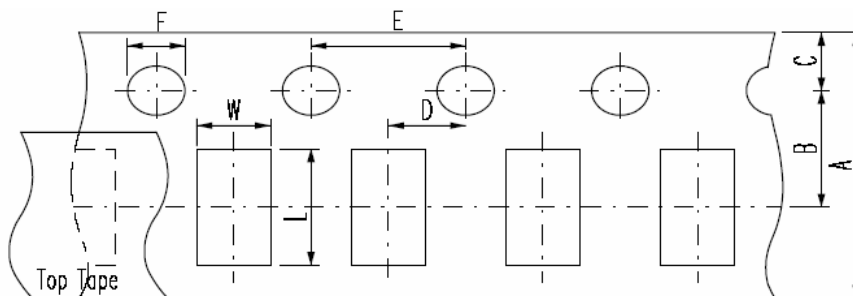
| Packaging | Tape & Reel | Standard Box |
|---------------|-------------|--------------|
| PESD1206Q-140 | 5,000 | 25,000 |

EIA referenced Reel Dimensions for PESD Devices



Reel Dimensions (mm):

| | A | B | C | D | E | F | G |
|---------------------|-----------|---------|----------|----------|----------|---------|----------|
| 1206 Devices | 178.0±2.0 | 2.0±0.5 | 13.0±0.5 | 21.0±0.8 | 62.0±1.5 | 9.0±0.5 | 13.0±1.0 |



Carrier Dimensions (mm):

| | A | B | C | D | E | F | L | W | T ¹ |
|---------------------|---------|----------|----------|----------|---------|---------|---------|----------|----------------|
| 1206 Devices | 8.0±0.3 | 3.5±0.05 | 1.75±0.1 | 2.0±0.05 | 4.0±0.1 | 1.5±0.1 | 3.5±0.2 | 1.9±0.20 | 0.75±0.05 |

Product Orientation – always face up (meaning the substrate is at the bottom), but parts do not have polarity mark.

POST REFLOW, CLEANING CONDITIONS

A 5% saponifier combined with water during wash.

For Ultrasonic process water temperature should be at 50°C and board should be submerged for a minimum of one minute in the solutions, then rinse and dry.

For in-line washing, the temperature of the water sprayed should be at 110°C, rinse and drying is done in-line.



Warning: Application Limitations for PESD1206Q-140. This part is not intended to be used under bias, nor for power bus applications. Users should independently evaluate the suitability of and test each product selected for their own applications

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