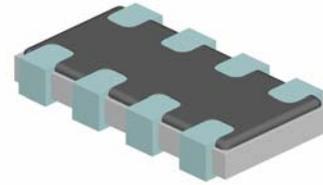


## Specification Status: Released

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

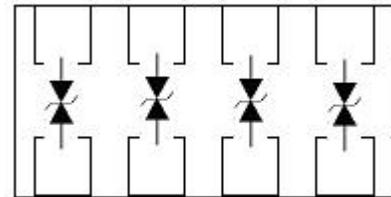
### BENEFITS

- 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

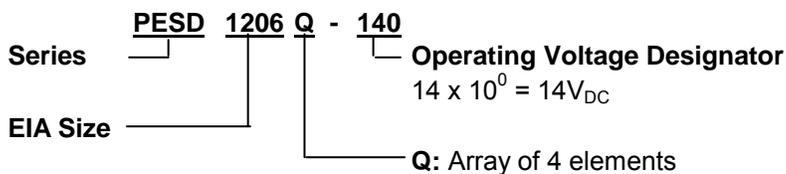
ROHS Compliant

Directive 2002/95/EC  
Compliant

ELV Compliant

Directive 2000/53/EC  
Compliant

### PART NUMBERING



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



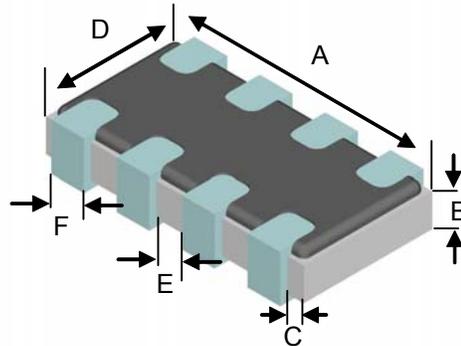
## ESD Protector Overvoltage Protection Device

**Raychem Circuit Protection Products**

**PRODUCT: PESD1206Q-140**

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

### DIMENSIONS



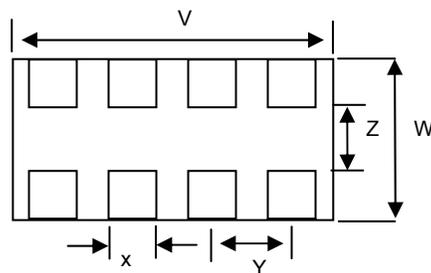
Drawing Not To Scale

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

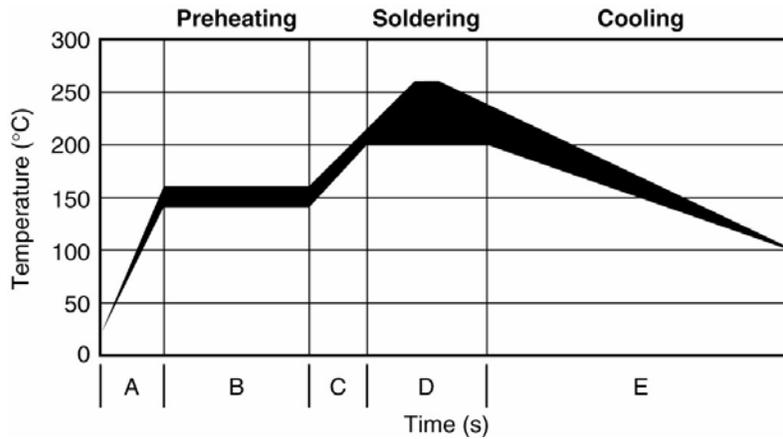


	V Ref	W Ref	X Ref	Y Ref	Z Ref
mm:	$3.2 \pm 0.2$	$2.2 \pm 0.2$	$0.50 \pm 0.1$	$0.8 \pm 0.2$	$1.0 \pm 0.1$
in*:	$(0.13 \pm 0.008)$	$(0.10 \pm 0.008)$	$(0.02 \pm 0.004)$	$(0.03 \pm 0.008)$	$(0.04 \pm 0.004)$

\*Rounded off approximation.

**SOLDER REFLOW RECOMMENDATIONS:**

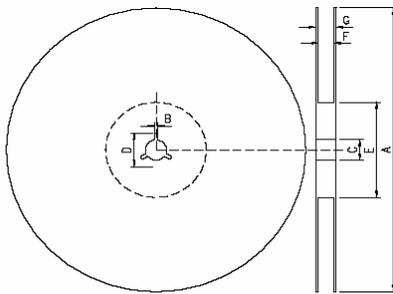
A	Temperature ramp up 1	From ambient to Preheating temperature	30s to 60s
B	Preheating	140°C - 160°C	60s to 120s
C	Temperature ramp up 2	From Preheating to Main heating temperature	20s to 40s
D	Main heating	at 200°C at 220°C at 240°C at 260°C	60s ~ 70s 50s ~ 60s 30s ~ 40s 5s ~ 10s
E	Cooling	From main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



**PACKAGING**

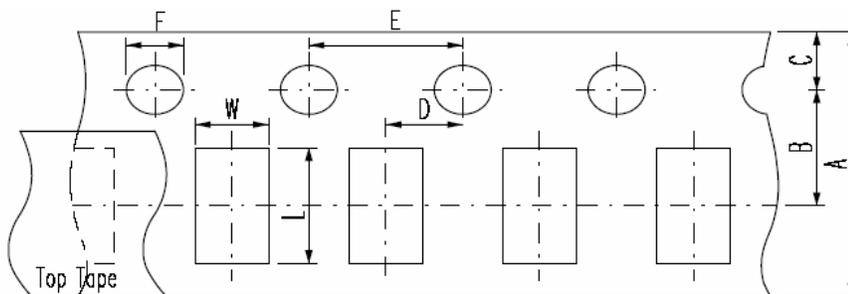
Packaging	Tape & Reel	Standard Box
PESD1206Q-140	5,000	25,000

**EIA referenced Reel Dimensions for PESD Devices**



**Reel Dimensions (mm):**

	A	B	C	D	E	F	G
<b>1206 Devices</b>	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 <sup>1</sup>
<b>1206 Devices</b>	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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