

Description

The 8KP series is designed specifically to protect sensitive electronic equipment from voltage transients induced by lightning and other transient voltage events.

Features

- Halogen free and RoHS compliant
- Glass passivated junction
- Low incremental surge resistance
- Excellent clamping capability
- 8000W peak pulse power capability at 10/1000 μ s waveform, repetition rate (duty cycle): 0.05%
- Fast response time
- Typical I_R less than 2 μ A above 22V devices
- High Temperature soldering guaranteed: 265 $^{\circ}$ C/10 seconds/.375", (9.5mm) lead length, 5lbs (2.3kg) tension
- Plastic package has underwriters laboratory flammability 94V-0
- Meet MSL level1, per J-STD-020
- IEC-61000-4-2 ESD 30kV(Air), 30kV (Contact)
- Unit Weight: 2.1g

Applications

TVS components are ideal for the protection of I/O Interfaces, VCC bus and other vulnerable circuits used in telecom, computer, Industrial and consumer electronic applications.

Maximum Ratings and Characteristics ($T_A=25^{\circ}$ C)

Rating	Symbol	Value
Peak pulse power dissipation at 10/1000 μ s waveform (Note1, Fig.1)	P_{PPM}	8000W
Peak pulse current of at 10/1000 μ s waveform (Note 1)	I_{PPM}	See Table(A)
Steady state power dissipation at $T_L=75^{\circ}$ C (Fig.3)	$P_{M(AV)}$	8.0W
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load, (JEDEC Method) (Note2, Fig.4)	I_{FSM}	400A
Operating junction and Storage Temperature Ranges	T_J, T_{STG}	-55 $^{\circ}$ C to +150 $^{\circ}$ C
Typical thermal resistance junction to lead	$R_{\theta JL}$	8 $^{\circ}$ C/W
Typical thermal resistance junction to ambient	$R_{\theta JA}$	40 $^{\circ}$ C/W

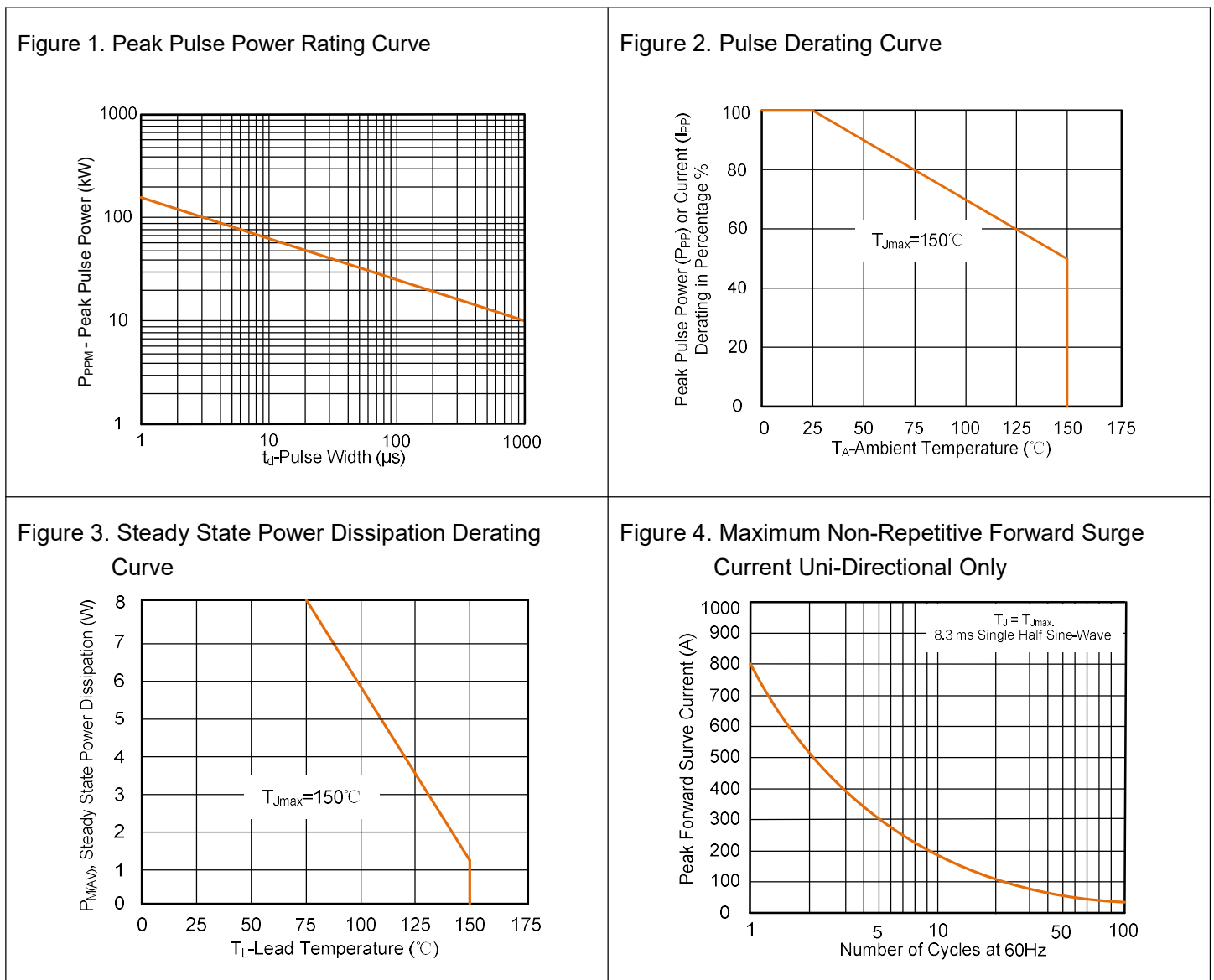
Notes:1. Non-repetitive current pulse, and derating above $T_A=25^{\circ}$ C per Fig.2.

2. 8.3ms single half sine-wave or equivalent square wave, duty cycle=4 pulses per minutes maximum.

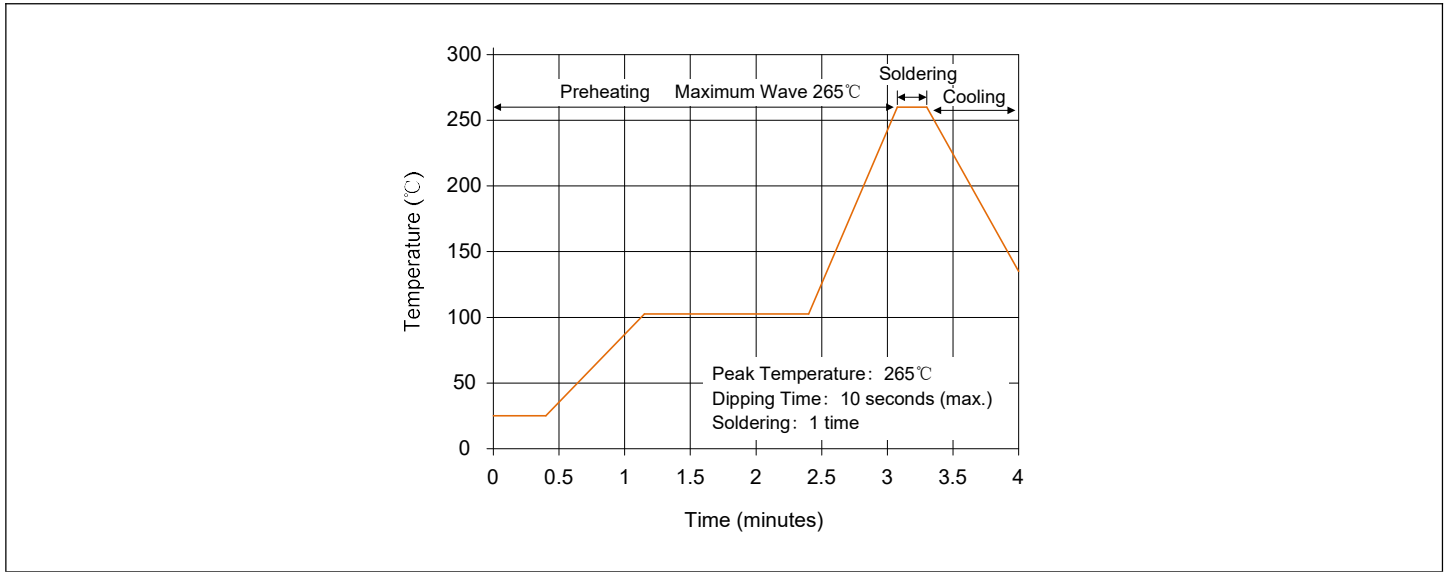
Electrical Characteristics ($T_A=25^\circ\text{C}$)

Part Number	Reverse Stand-Off Voltage	Breakdown Voltage @ I_T		Test Current	Maximum Clamping Voltage @ I_{PP}	Peak Pulse Current	Reverse Leakage @ V_R
	$V_R(V)$	$V_{B Min.}(V)$	$V_{B Max.}(V)$	$I_T(mA)$	$V_C(V)$	$I_{PP}(A)$	$I_R(\mu A)$
8KP36A	36	40	44.2	5	58.1	137.7	2

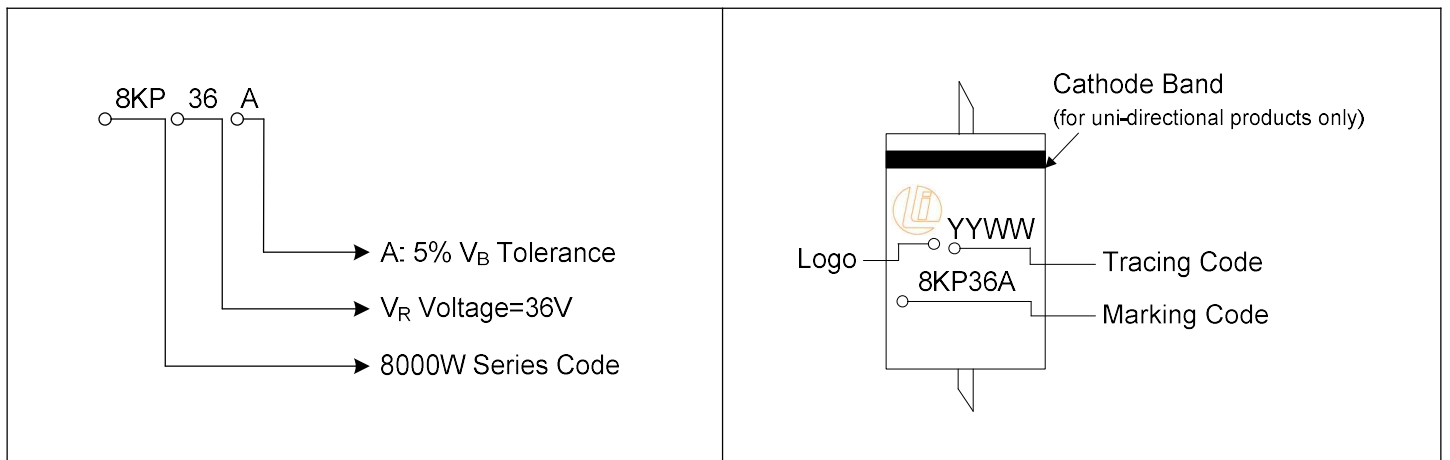
Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$)



Wave Soldering



Part Number Code and Marking Code



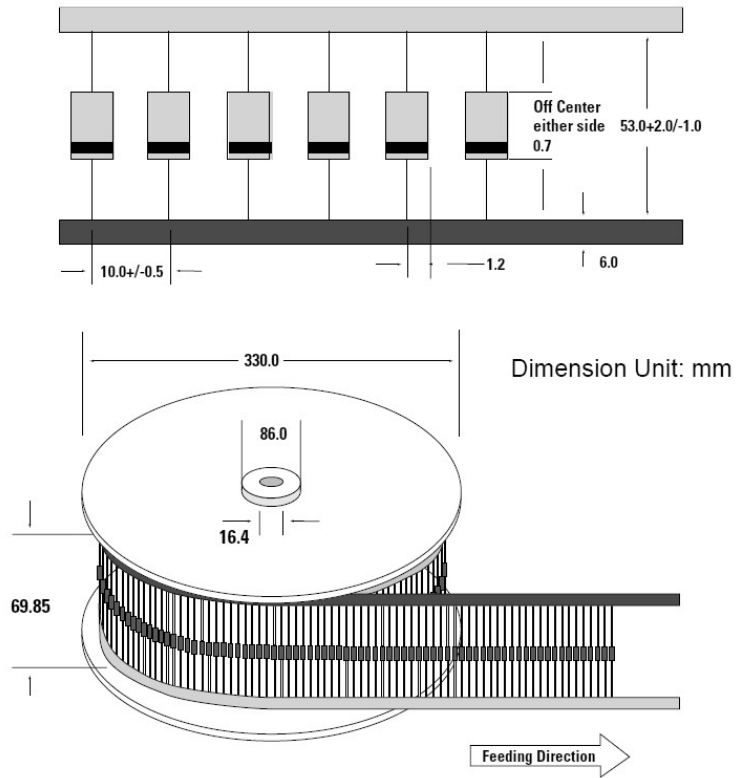
Dimensions (P600)

The diagram shows the dimensions of the diode. A is the length of the leads, B is the width of the body, C is the height of the body, and d is the thickness of the leads.

Symbol	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.40	-	1.000	-
B	8.60	9.10	0.340	0.360
C	8.60	9.10	0.340	0.360
d	1.19	1.35	0.047	0.053

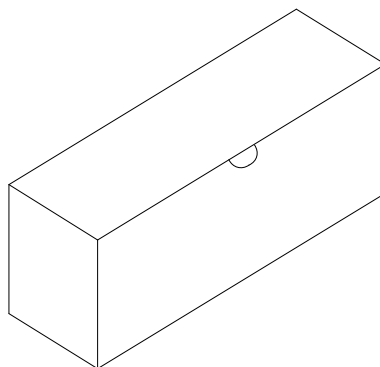
Packaging Specification

Tape



Quantity: 800pcs/reel

Box



Quantity: 300pcs/box

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