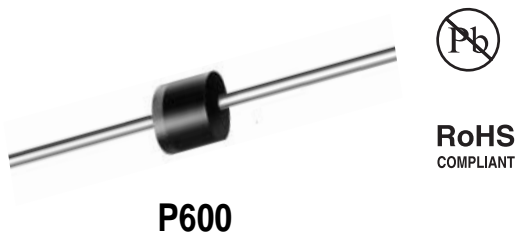


FEATURES

- 15000 watts Peak Pulse Power (10/1000us)
- Glass Passivated Junction
- Fast Response Time :Typically < 1ns
- Excellent Clamping Capability
- Meets ISO7637-2 surge spec (varied by test condition)
- Plastic package has Underwriters Laboratory Flammability classification 94V-0
- High temperature soldering guaranteed:260°C /10 seconds/.375",(9.5mm) lead length/5lbs.,(2.3kg) tension



P600

MECHANICAL DATA

- JEDEC P600 molded plastic
- Polarity: Color band denoted cathode except Bipolar
- Marking : Marking Code
- Mounting Position: Any
- RoHS Compliant

PRIMARY CHARACTERISTICS	
V _{WM}	15V to 43V
P _{PPM}	15000W
P _D	6.5W
I _{FSM}	600 A
T _J max.	175 °C

TYPICAL APPLICATIONS

- I/O Interfaces
- Power lines
- Automotive and Telecommunication
- Signal lines of sensor units for consumer
- Industrial Electronics
- Computer

CHARACTERISTICS

MAXIMUM RATINGS (T _A = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Peak pulse power dissipation with a 10/1000 μs waveform ⁽¹⁾	P _{PPM}	15000	W
Peak pulse current with a 10/1000 μs waveform	I _{PPM}	See next table	A
Power dissipation on infinite heat sink at T _A = 50 °C (Fig. 5)	P _D	6.5	W
Peak Forward surge current ⁽²⁾	I _{FSM}	600	A
Operating junction and storage temperature range	T _J , T _{STG}	- 55 to + 175	°C

Notes:

(1) Non-repetitive current pulse, per Fig.3 and derated above TA=25°C per Fig.2.

(2) Measured on 8.3ms single half sine wave or equivalent square wave, duty cycle=4 per minute maximum.

■ ELECTRICAL CHARACTERISTICS

Type Number		Reverse Stand-Off Voltage	Breakdown Voltage Min. @ I	Breakdown Voltage Max. @ I	Test Current	Maximum Clamping Voltage	Peak Pulse Current	Reverse Leakage @V _{RMW}
(Uni)	(Bi)	V _{RMW} (V)	V _{BR MIN} (V)	V _{BR MAX} (V)	I _T (mA)	V _C (V)	I _{PP} (A)	I _R (uA)
15KP15A	15KP15CA	15	16.7	19.2	5	24.4	614	500
15KP16A	15KP16CA	16	17.8	19.7	5	26.0	576	500
15KP17A	15KP17CA	17	18.9	21.7	5	27.6	543	500
15KP18A	15KP18CA	18	20.0	23.3	5	29.2	513	200
15KP20A	15KP20CA	20	22.2	25.5	5	32.4	462	200
15KP22A	15KP22CA	22	24.4	28.0	5	35.5	422	200
15KP24A	15KP24CA	24	26.7	30.7	5	38.9	385	200
15KP26A	15KP26CA	26	28.9	33.2	5	42.1	356	200
15KP28A	15KP28CA	28	31.1	35.8	5	45.4	330	10
15KP30A	15KP30CA	30	33.3	38.3	5	48.4	309	10
15KP33A	15KP33CA	33	36.7	42.2	5	53.3	281	10
15KP36A	15KP36CA	36	40.0	46.0	5	58.1	258	10
15KP40A	15KP40CA	40	44.4	51.2	5	64.5	232	10
15KP43A	15KP43CA	43	47.8	52.8	5	69.4	216	10

For bidirectional type VR of 10 volts and less, the IR limit is double.

For parts without A, the VBR is ± 10% and VC is 5% higher than with A parts.

RATINGS AND CHARACTERISTIC CURVES (TA=25°C unless otherwise noted)

Figure 1. Peak Pulse Power Rating Curve

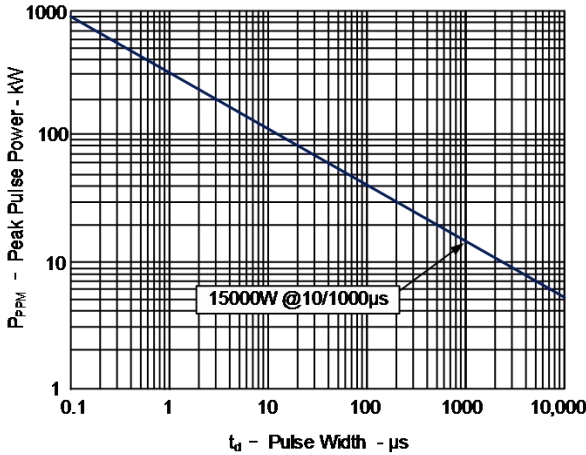


Figure 2. Pulse Derating Curve

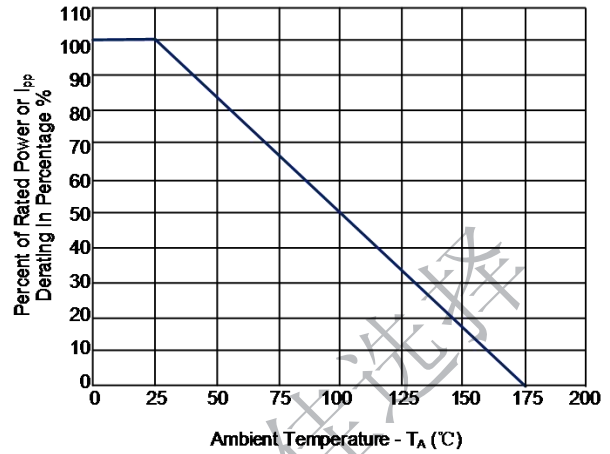


Figure 3. Pulse Waveform

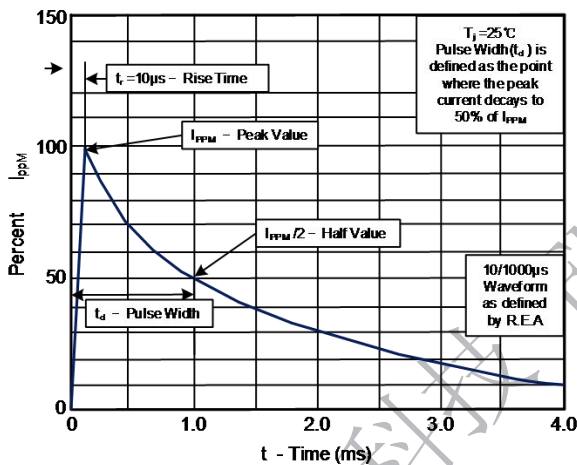


Figure 4. Typical Junction Capacitance

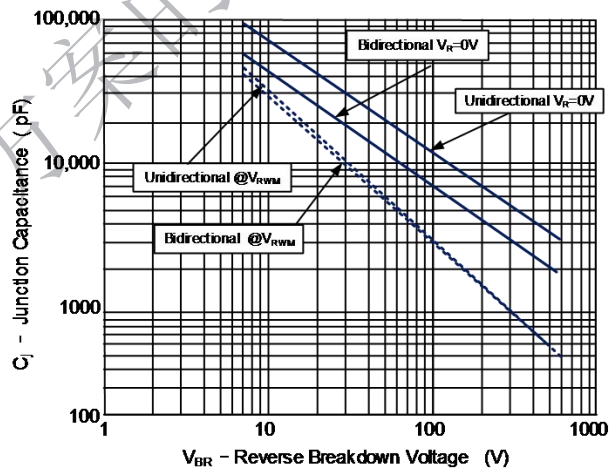


Figure 5. Steady State Power Dissipation Derating Curve

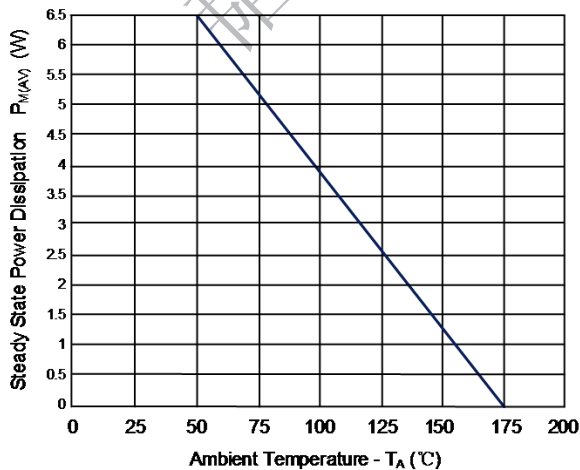
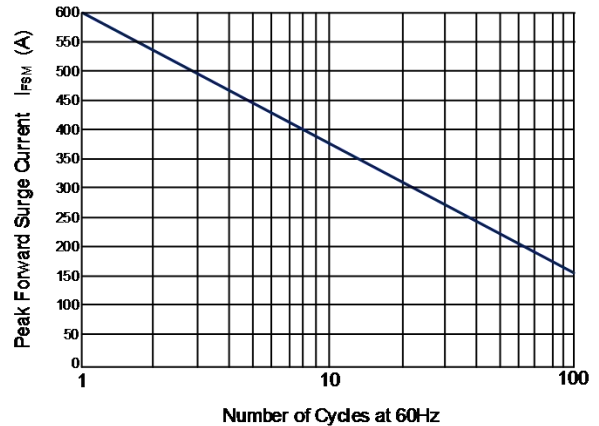
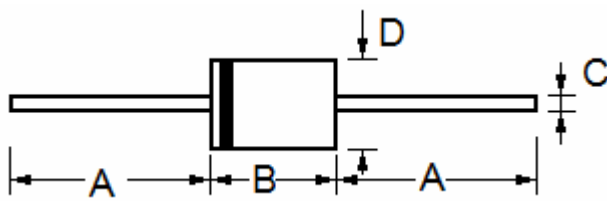


Figure 6. Maximum Non-Repetitive Forward Surge Current Only Unidirectional



■ PACKAGE DIMENSIONS



Item	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.40	-	1	-
B	8.60	9.10	0.339	0.358
C	1.22	1.32	0.048	0.052
D	8.60	9.10	0.339	0.358

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