WEITRON

P6KE600C

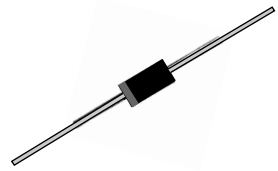
600W Transient Voltage Suppressors

Pb Lead(Pb)-Free

Peak Pulse Power
600 Watt
Break Down Voltage
600 VOLTS

Feature:

* Plastic package
* Glass passivated chip junction in DO-15 Package
* 600W surge capability at 10/1000 μs wave form
* Excellent clamping capability
* Low zener impedance
* Fast response time: typically less than 1.0ps from 0 Volts to BV min.
* Typical IR less than 1μA above 10V
* High temperature soldering guaranteed: 265°C/10 seconds/.375", (9.5mm) lead length, 5lbs., (2.3kg) tension



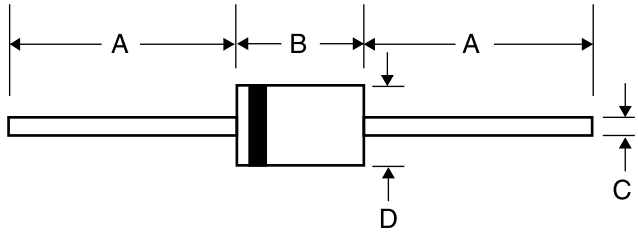
DO-15
(DO-204AC)

Mechanical Data

* Case: JEDEC DO-15 molded Plastic.
* Terminals: Axial Leads, Solderable per MIL-STD-750, Method 2026
* Polarity: Color Band Denotes Cathode Except Bipolar
* Mounting Position: Any
* Weight: 0.4 grams(approx), 0.015 ounce.

DO-15 Outline Dimensions

Axial Device



	A		B		C		D	
Dim	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**
DO-15	**25.4**	**-**	**5.8**	**7.6**	**0.71**	**0.86**	**2.6**	**3.6**

Maximum Ratings (T_A=25°C Unless otherwise Noted)

Characteristics	Symbol	Value	Unit
Peak Pulse Power Dissipation at T_A =25°C, tp=1.0 ms (1)	P_{PPM}	600(Min)	W
Steady State Power Dissipation at TL=75°C Lead Lengths .375"(9.5mm) (2)	$P_{M(AV)}$	5	W
Peak Forward Surge Current 8.3ms Single Half Sine-Wave, Superimposed on Rated Load(JEDEC Method) (3)	I_{FSM}	100	A
Operating and Storage Junction Temperature Range	Tj, T_{STG}	-55 to -175	°C

NOTE: 1. Non-Repetitive Current Pulse, per FIG3 and Derated above TA=25°C per FIG2

2. Mounted on Copper Pads Area of 1.6 ×1.6"(40 × 40mm) per FIG.5.

3. 8.3ms Single Half Sine-Wave, or equivalent Square Wave, Duty Cycle=4 pulses per minutes Maximum.

Electrical Characteristics

P6KE PART NUMBER	REVERSE STAND-OFF VOLTAGE V_{RWM}(V)	BREAKDOWN VOLTAGE V_{BR}(V) MIN.@I_T	BREAKDOWN VOLTAGE V_{BR}(V) MAX.@I_T	TEST CURRENT I_T (mA)	MAXIMUM CLAMPING VOLTAGE @Ipp Vc(V)	PEAK PULSE CURRENT Ipp(A)	REVERSE LEAKAGE @V_{RWM} I_R(μA)
P6KE600C	512	540	660	1	828	0.75	5

For bidirectional type having Vrwm of 10 volts and less, the IR limit is double.
For parts without A , the V_{BR} is ± 10%

RATINGS AND CHARACTERISTIC CURVES

Ratings and Characteristic Curves (T_A=25℃ unless otherwise noted)

Pig.1 - Peak Pulse Power Rating Curve

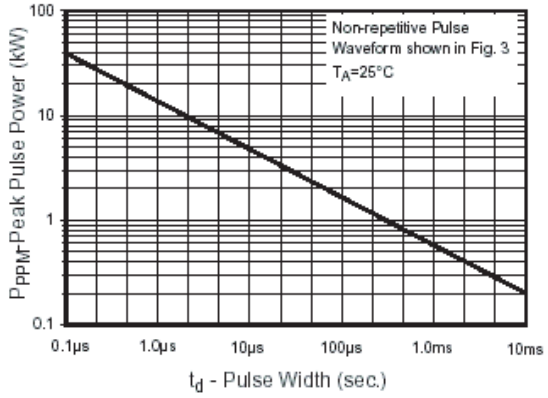


Fig.2 - Pulse Derating Curve

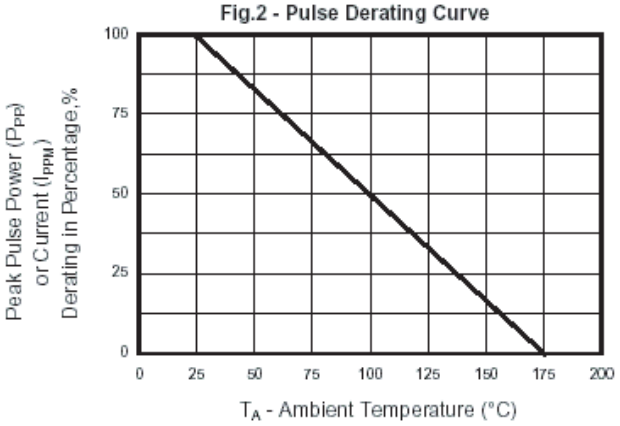


Fig.3 - Pulse Waveform

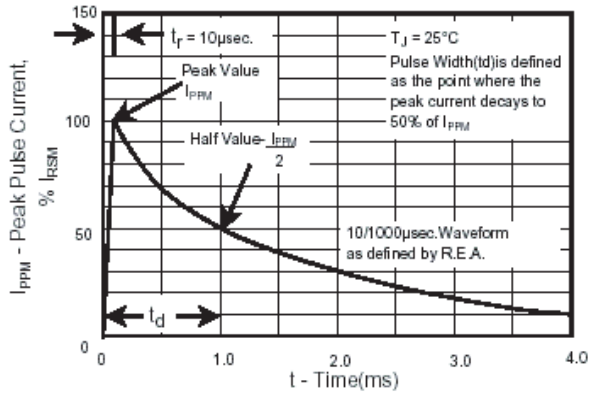


Fig.4 - Typ.Junction Capacitance Uni-Directional

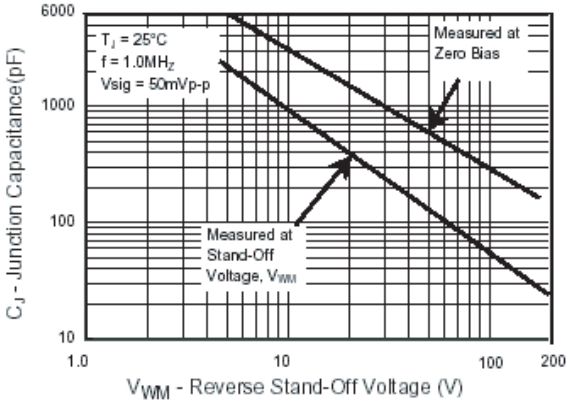


Fig.5 - steady State Power Derating Curve

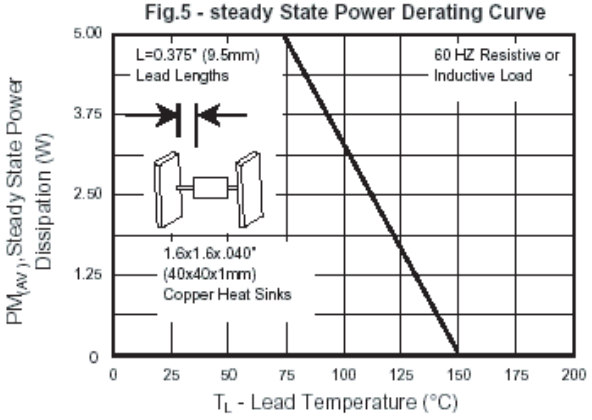


Fig.6 - Max.Non-Repetitive Forward Surge Current

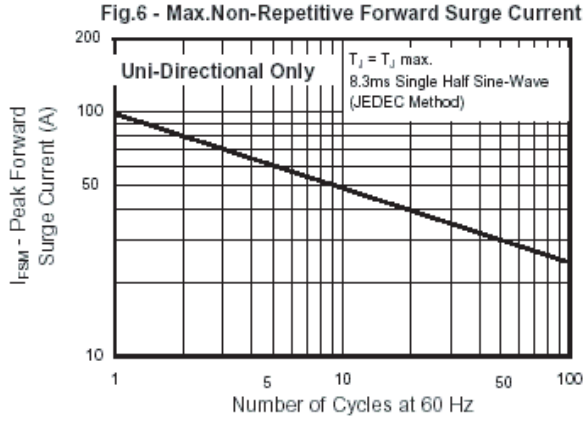


Fig.7 - Typical Reverse Leakage Characteristics

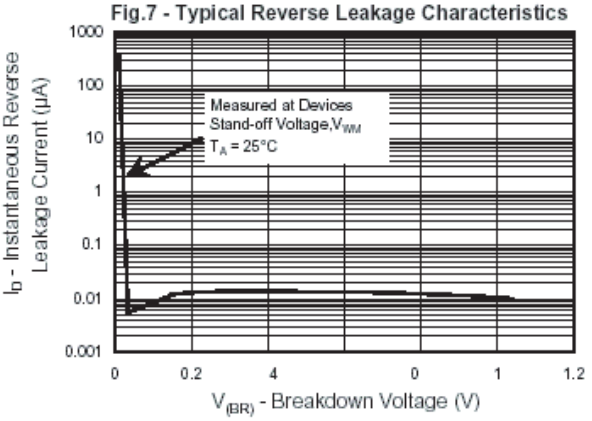


Fig. 8 - Typ.Transient Thermal Impedance