

P6KE-HF Series

Breakdown Voltage: 6.8 to 600 Volts


Peak Pulse Power: 600 Watts

RoHS Device

Halogen Free

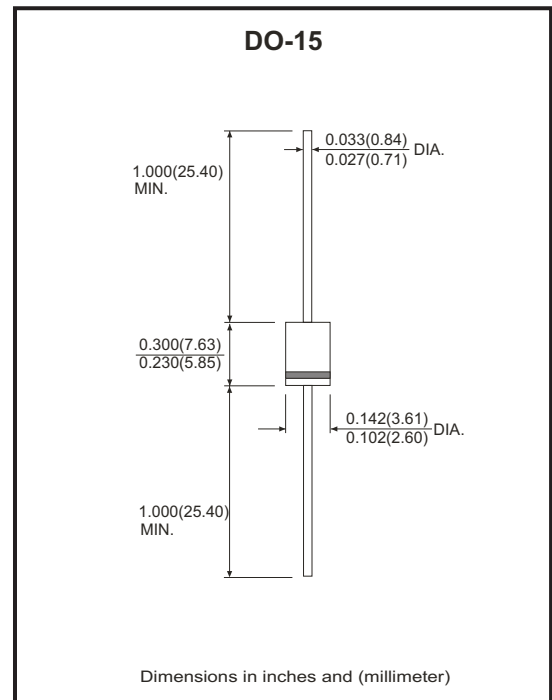


Features

- Glass passivated chip.
- 600W peak pulse power capability with a 10/1000 μ s waveform, repetitive rate (duty cycle):0.01%
- Low leakage.
- Uni and Bidirectional unit.
- Excellent clamping capability.
- Very fast response time.
- UL recognized file # E349157  Range: P6KE6.8(C)A thru. P6KE47(C)A

Mechanical Data

- Case: Molded plastic DO-15.
- Epoxy: UL 94V-0 rate flame retardant.
- Lead: Solderable per MIL-STD-202, method 208 guaranteed.
- Polarity: Color band denotes cathode end except Bipolar.
- Mounting position: Any.
- Weight: 0.402 gram (approx.)



Maximum Ratings (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak power dissipation with a 10/1000 μ s waveform (Note 1)	PPP	600	W
Peak pulse current with a 10/1000 μ s waveform (Note 1)	I _{PP}	See Next Table	A
Power dissipation on infinite heatsink at T _L =75°C	P _D	5.0	W
Peak forward surge current, 8.3ms single half sine-wave unidirectional only (Note 2)	I _{FSM}	100	A
Maximum instantaneous forward voltage at 50 A for unidirectional only (Note 3)	V _F	3.5/5.0	V
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150	°C

NTOES:

- (1) Non-repetitive current pulse per fig.5 and derated above TA=25°C per fig.1
- (2) Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum
- (3) V_F<3.5V for devices of V_{BR}<200V and V_F<5.0V for devices of V_{BR}>201V

Company reserves the right to improve product design , functions and reliability without notice.

REV:D

Rating and Characteristic Curves (P6KE-HF Series)

Fig.1 - Pulse Derating Curve

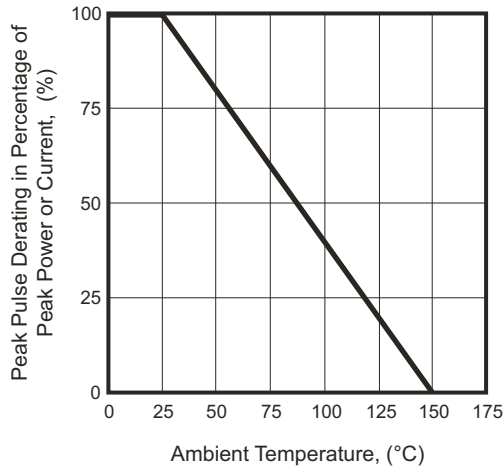


Fig.2 - Maximum Non-Repetitive Surge Current



Fig.3 - Steady State Power Derating Curve

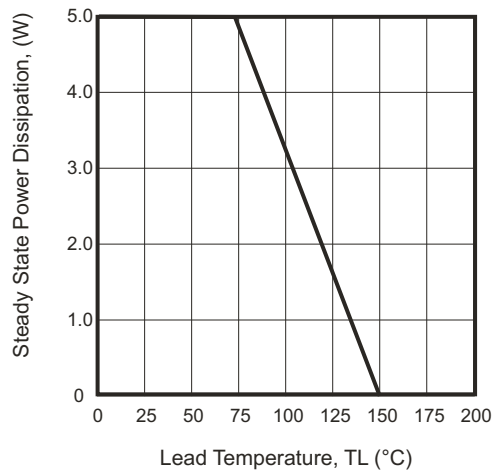


Fig.4 - Peak Pulse Power Rating Curve



Fig.5 - Pulse Waveform

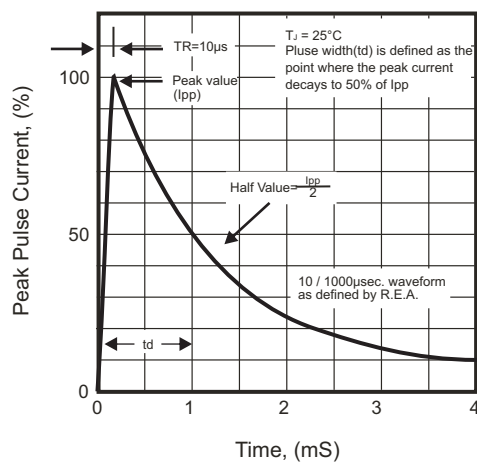


Fig.6 - Typical Junction Capacitance



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