TAJE

SURFACE MOUNT ULTRA-FAST SWITCHING RECTIFIER

VOLTAGE：600V **CURRENT：1.0A**

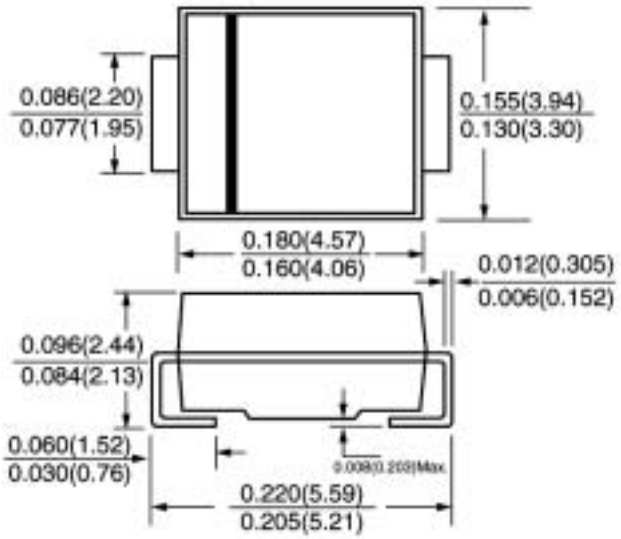
FEATURE

Ideal for surface mount pick and place application
Low profile package
Built-in strain relief
High surge capability
High temperature soldering guaranteed
260°C/10sec/at terminals
Glass passivated chip
Fast recovery time for high efficiency

MECHANICAL DATA

Terminal：Plated axial leads solderable per MIL-STD 202E, method 208C
Case：Molded with UL-94 class V-0 recognized Flame Retardant Epoxy
Polarity：color band denotes cathode

SMB／DO-214AA



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

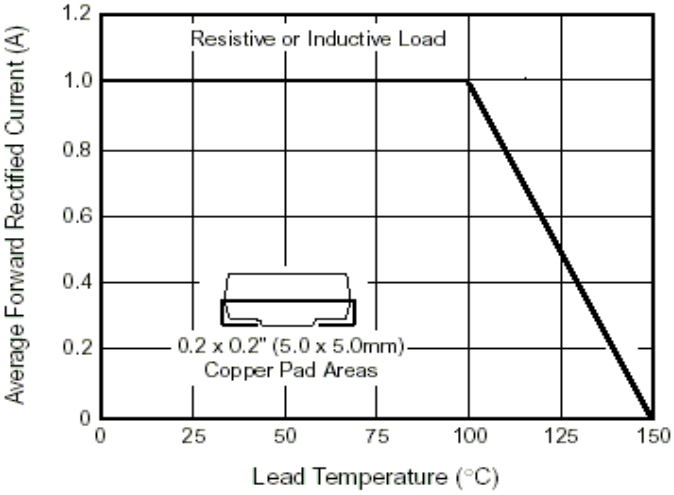
	SYMBOL	TAJE	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	V
Maximum RMS Voltage	Vrms	420	V
Maximum DC blocking Voltage	Vdc	600	V
Maximum Average Forward Rectified at T_L =100°C	If(av)	1.0	A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load	Ifsm	25	A
Maximum Instantaneous Forward Voltage at rated forward current 1.0A	Vf	1.75	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	10.0 500.0	μA μA
Maximum Reverse Recovery Time (Note1)	Trr	20	nS
Typical Junction Capacitance (Note 2)	Cj	4.5	pF
Typical Thermal Resistance (Note 3)	R(ja)	23.0	°C/W
Storage and Operating Junction Temperature	Tstg, Tj	-50 to +150	°C

Note：

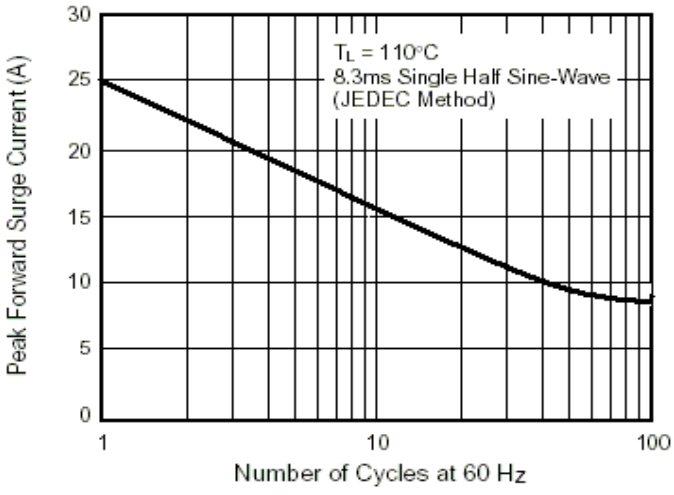
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area

[1]

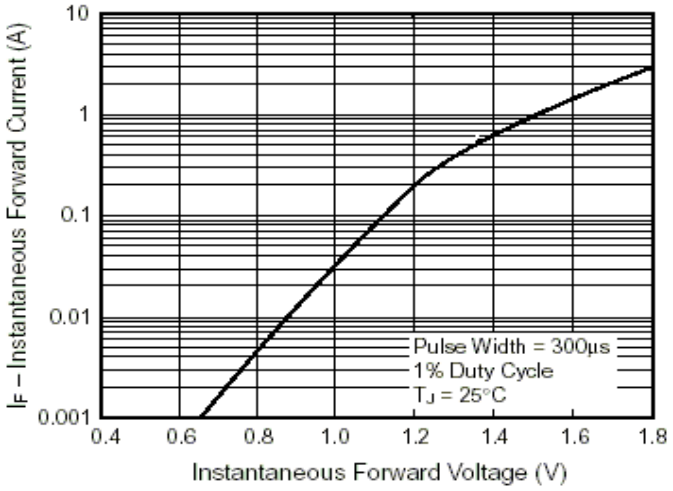
Forward Current Derating Curve



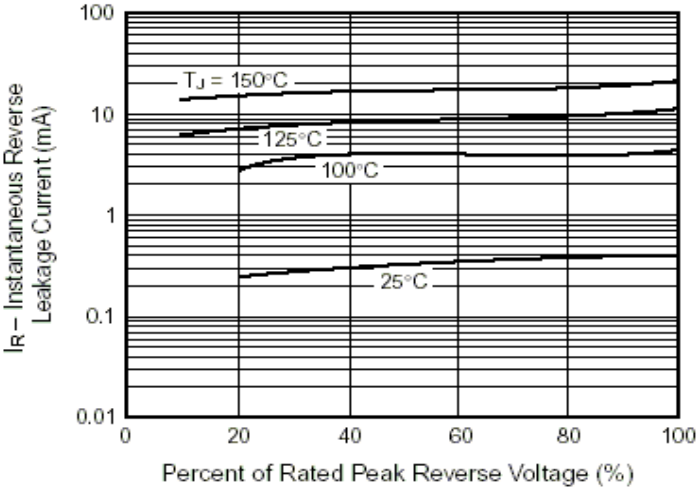
Maximum Non-Repetitive Peak Forward Surge Current



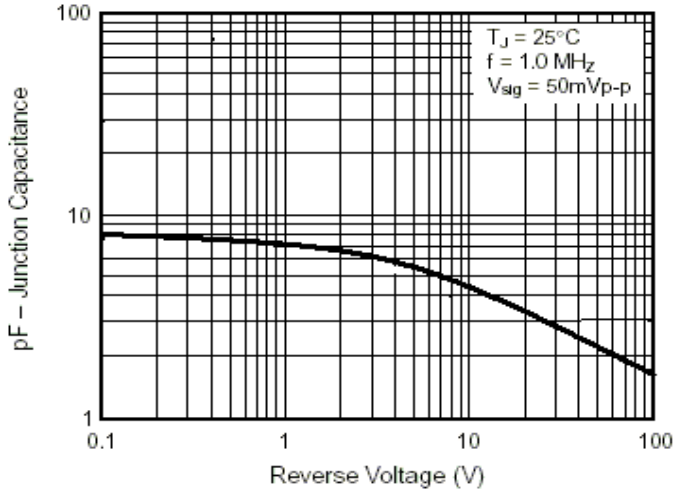
Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



[1] Rev.A1, 1-Aug-04