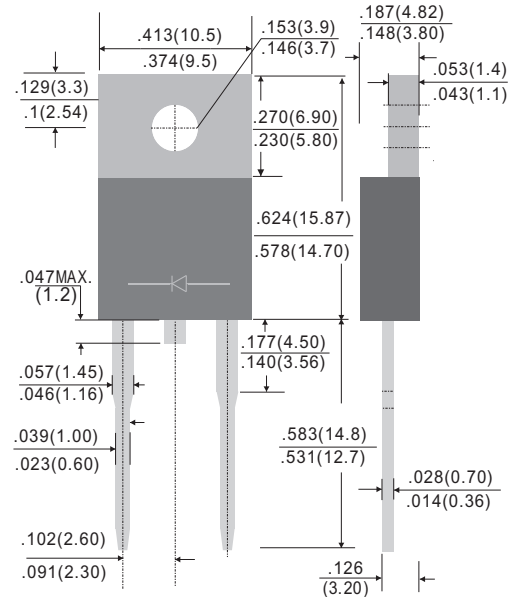


Mechanical Date

- Cases: TO-220A
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead free Plating (Tin Finish) Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.899 grams (approximate)



TO-220A



Dimensions in inches and (millimeters)

Features

- Guardring for overvoltage protection
- Very small conduction losses
- Low forward voltage drop
- Component in accordance to RoHS 2002/95/EC
- **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"

MAXIMUM RATINGS (TA=25°C unless otherwise noted)							
PARAMETER	SYMBOL	SR840	SR860	SR8100	SR8150	SR8200	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	40	60	100	150	200	V
Maximum RMS voltage	V _{RMS}	28	42	70	105	140	V
Maximum DC blocking voltage	V _{DC}	40	60	100	150	200	V
Maximum average forward rectified current	I _F	8					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	125.0					A
Maximum Instantaneous Forward Voltage IF=8A @ 25°C	V _F	0.55	0.70	0.85	0.92		V
Maximum DC Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=100°C	I _R	0.5 30		0.2 10			mA
Typical Junction Capacitance(NOTE1)	C _j	420	300	260	230	200	pF
Typical Thermal Resistance	R _{θJC}	3					°C/W
Operating Temperature Range	T _J	-55 to +125			-55 to +150		°C
Storage Temperature Range	T _{STG}	-55 to +150					°C

NOTES:1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

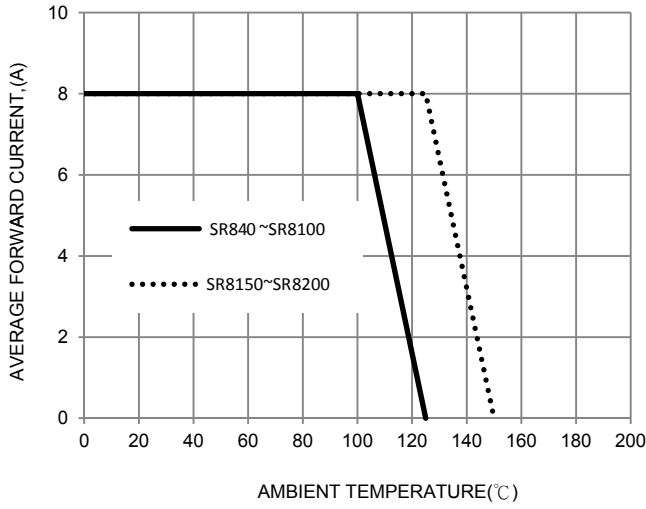


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

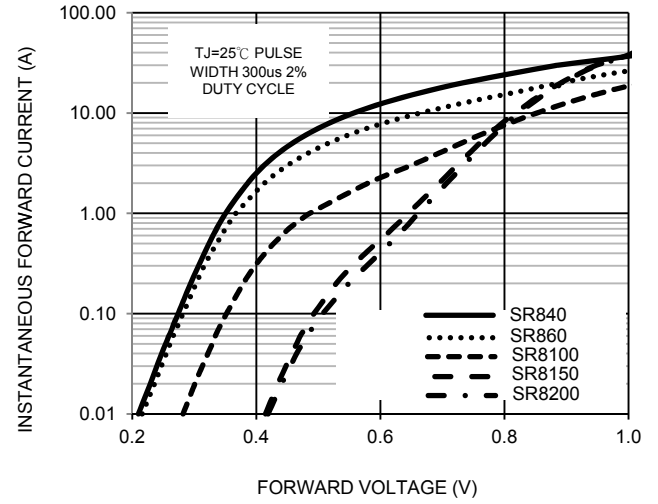


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

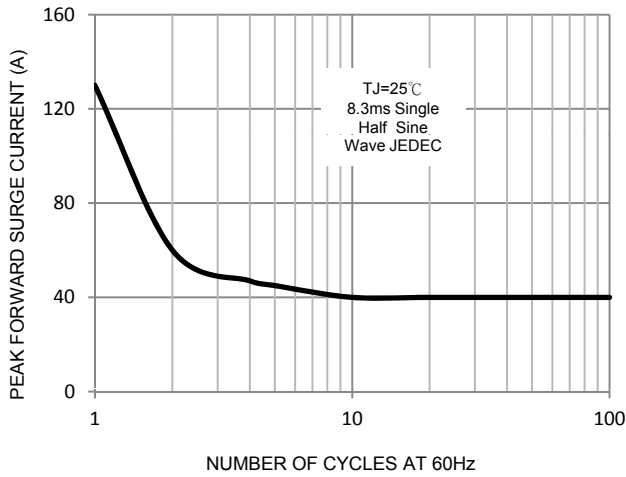


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

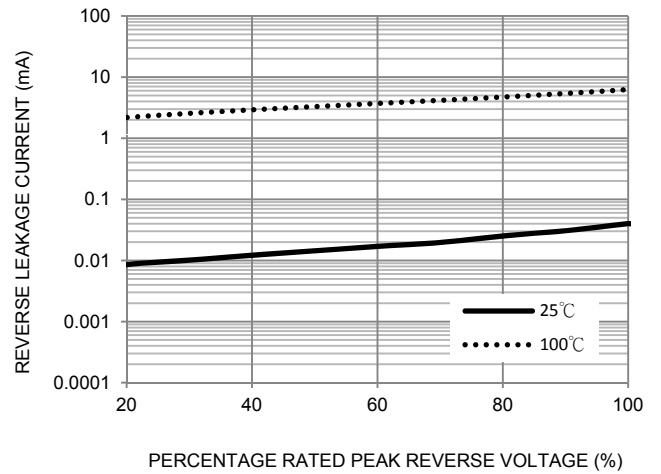


FIG. 5-TYPICAL JUNCTION CAPACITANCE

