



SCHOTTKY BARRIER RECTIFIERS

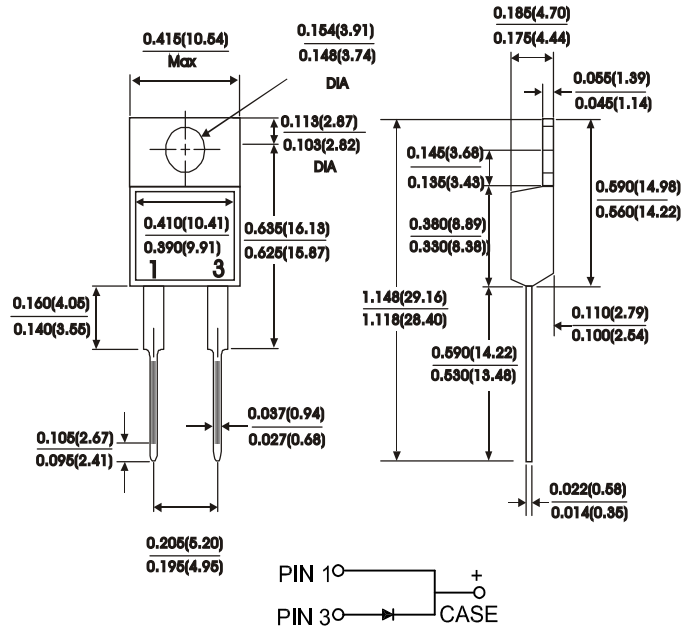
TO-220 AC

FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction Majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High temperature soldering guaranteed: 250°C / 10 seconds, 0.25" (6.35mm) from case

MECHANICAL DATA

Case : JEDEC TO-220AC molded plastic  
 Terminals : Leads solderable per MIL-STD-750 Method 2026  
 Polarity : As marked  
 Mounting Position : Any  
 Mounting Torque 5 In - lbs. max  
 Weight : 0.08 ounce, 2.24 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase half wave, 60 Hz resistive or inductive load.  
 For capacitive load. derate current by 20%.

Characteristic	Symbol	SR1090	SR10100	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	90	100	Volts
Maximum RMS voltage	$V_{RMS}$	63	70	Volts
Maximum DC blocking voltage	$V_{DC}$	90	100	Volts
Maximum average forward rectified current at $T_C=125^\circ C$	$I_{(AV)}$	10		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150		Amps
Maximum instantaneous forward voltage $I_F=10A$ (NOTE 2) $I_F=20A$	$V_F$	0.80	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 2) $T_C=25^\circ C$ $T_C=100^\circ C$	$I_R$	0.5	6.0	mA
Typical thermal resistance (NOTE 1)	$R_{th-JC}$	2.0		$^\circ C/W$
Operating temperature range	$T_J$	-65to+ 150		$^\circ C$
Storage temperature range	$T_{Stg}$	-65to+ 175		$^\circ C$

NOTES:

- (1) Thermal resistance from junction to case
- (2) Pulse test : 300 us pulse width, 1% duty cycle



RATINGS AND CHARACTERISTIC CURVES

FIG.1 - TYPICAL FORWARD CORRENT DERATING CURVE

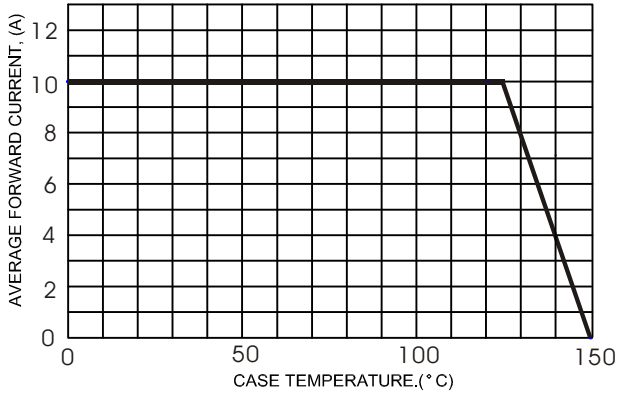


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

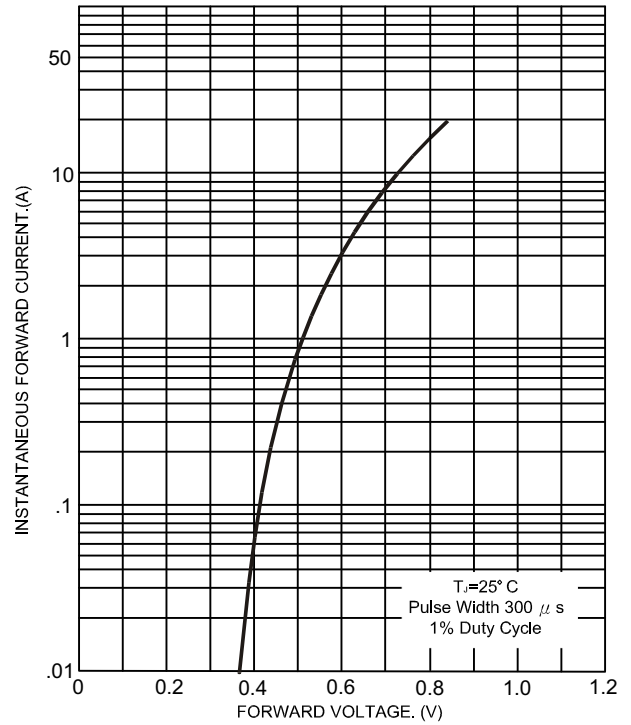


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

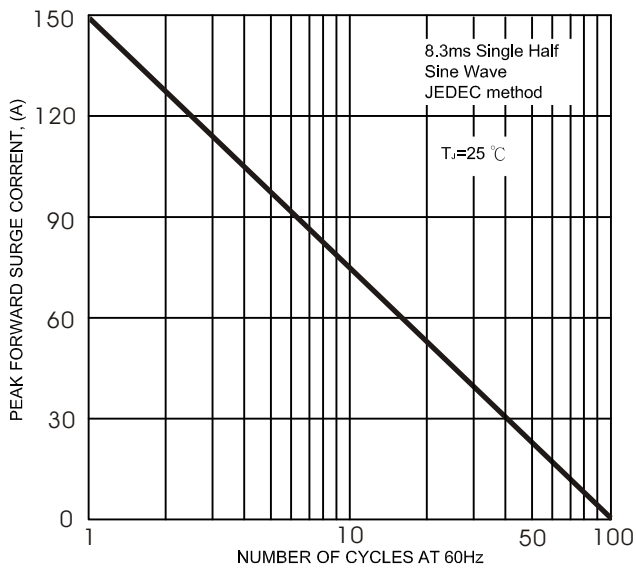
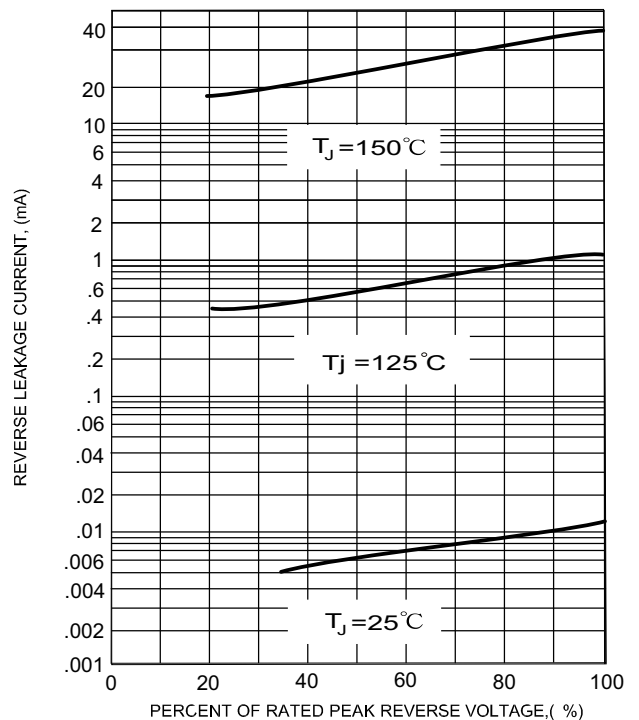


FIG.4- TYPICAL REVERSE CHARACTERISTICS





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