



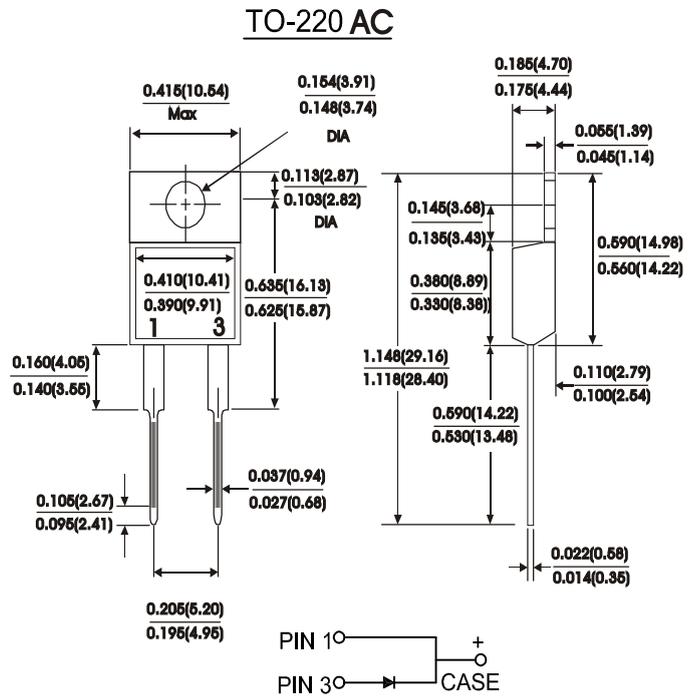
**SCHOTTKY BARRIER RECTIFIERS**

**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	SR 820	SR 830	SR 835	SR 840	SR 845	SR 850	SR 860	SR 880	SR 8100	Units	
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	35	40	45	50	60	80	100	Volts	
Maximum RMS voltage	$V_{RMS}$	14	21	25	28	32	35	42	56	70	Volts	
Maximum DC blocking voltage	$V_{DC}$	20	30	35	40	45	50	60	80	100	Volts	
Maximum average forward rectified current at See fig. 1	$I_o$	8.0									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 (NOTE 2) $I_F = 8.0A$	$V_F$	0.63			0.73			0.85		Volts		
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 2) $T_c = 25^\circ C$ $T_c = 125^\circ C$	$I_R$	0.5				50					mA	
Typical thermal resistance (NOTE 1)	$R_{th-JC}$	5.0										$^\circ C/W$
Operating temperature range	$T_J$	-65to+150									$^\circ C$	
Storage temperature range	$T_{Stg}$	-65to+150									$^\circ C$	

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 CURRENT DERATING CURVE

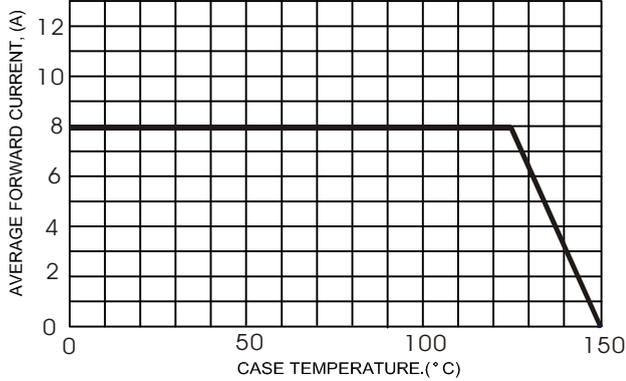


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

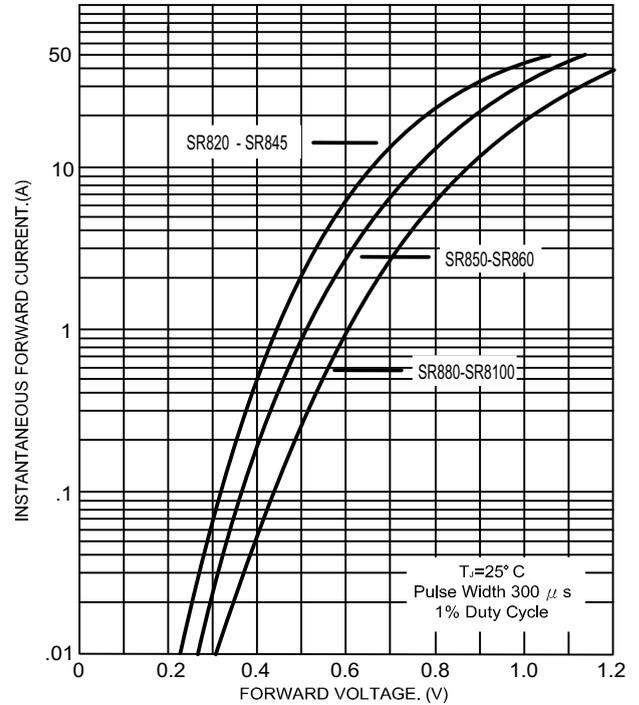


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

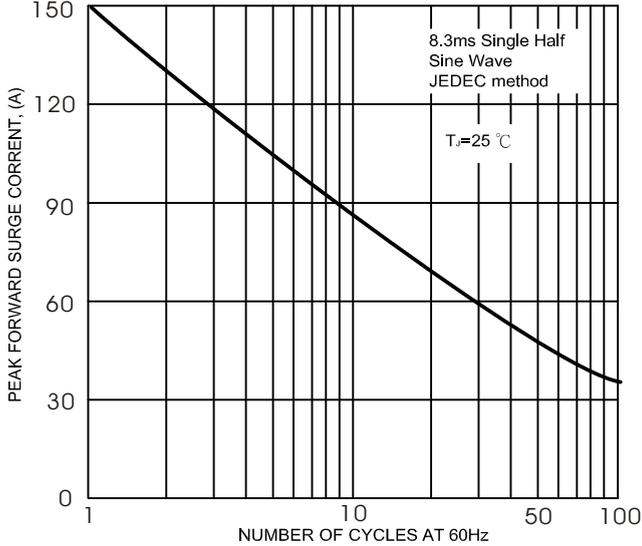


FIG.4 - TYPICAL JUNCTION CAPACITANCE

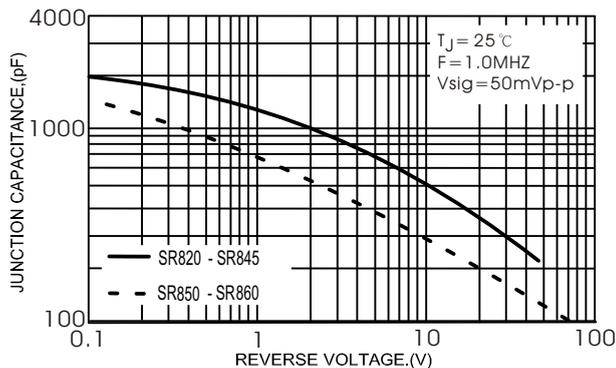
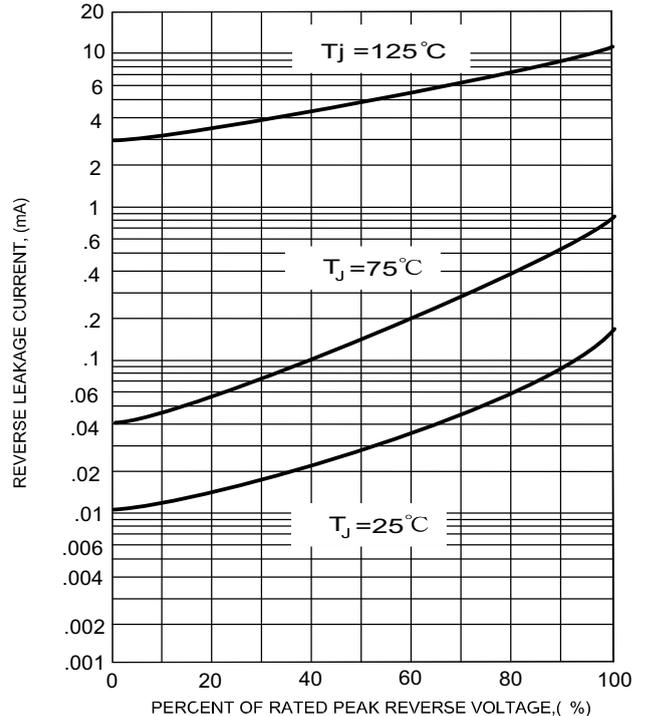


FIG.5 - TYPICAL REVERSE CHARACTERISTICS





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