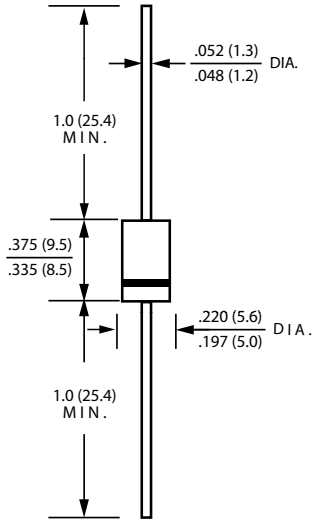




SR820 thru SR8200



Schottky Barrier Rectifiers



DO-201AD

Dimensions in inches and (millimeters)



Ordering Information	
Part Number	Remark
SR8xx	General
SR8xx-H	Halogen Free
SR8xx-Q	Automotive

PRIMARY CHARACTERISTICS	
I_F	8A
V_{RRM}	20~200V
I_{FSM}	125A
V_F	0.55V, 0.70V, 0.85V, 0.92V
T_J max	125°C , 150°C

Features

- Guardring for overvoltage protection
- Very small conduction losses
- Low forward voltage drop
- Component in accordance to RoHS 2002/95/EC
- AEC-Q101 qualified

Mechanical Data

- Cases: DO-201AD
- 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: 1.071 grams (approximate)

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	SR 820	SR 830	SR 840	SR 845	SR 850	SR 860	SR 880	SR 8100	SR 8150	SR 8200	UNIT	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	31.5	35	42	56	70	105	140	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	45	50	60	80	100	150	200	V	
Maximum average forward rectified current	I_F	8.0										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	$R_{\theta Ja}$ $R_{\theta Jc}$	50 30											°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



Schottky Barrier Rectifiers

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

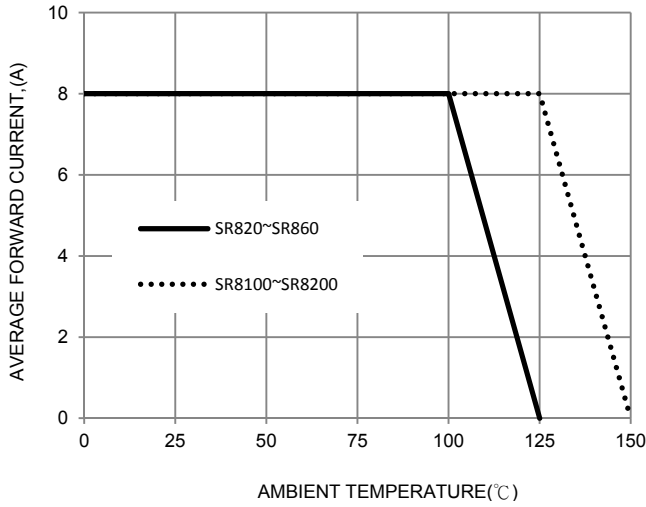


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

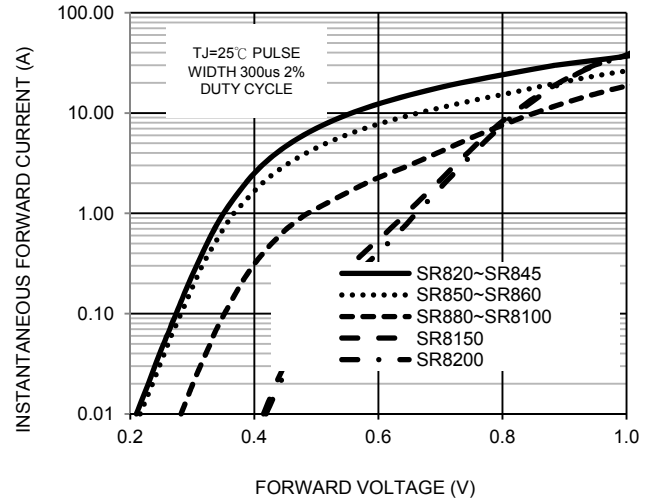


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

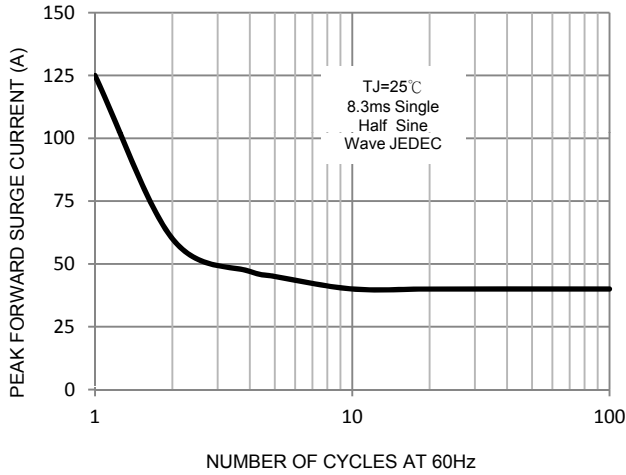


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

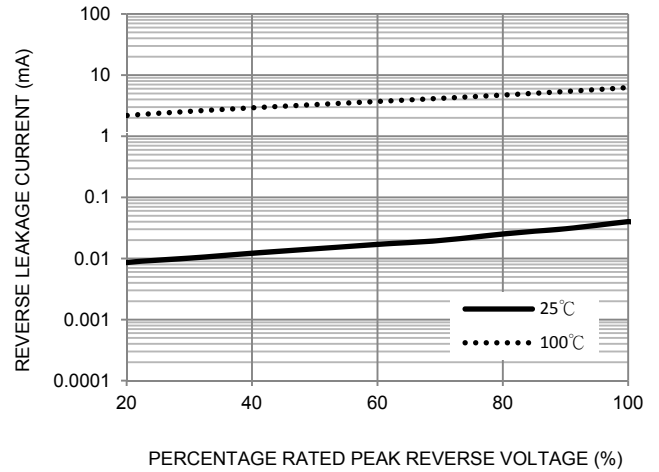


FIG. 5-TYPICAL JUNCTION CAPACITANCE

