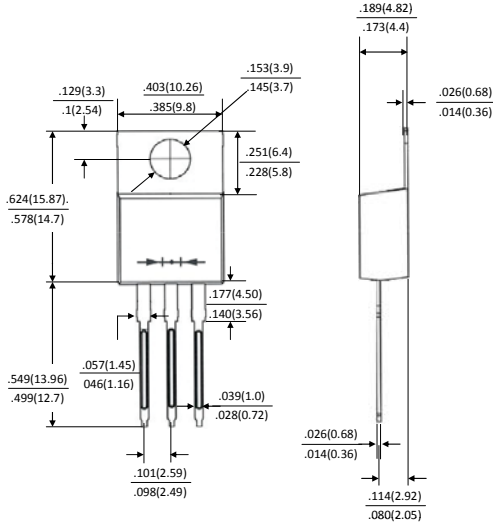




SR1045SGB thru SR1060SGB



Schottky Barrier Rectifiers



TO-220SGB

Dimensions in inches and (millimeters)



Ordering Information	
Part Number	Remark
SR10x0SGB	General
SR10x0SGB-H	Halogen Free

PRIMARY CHARACTERISTICS	
I_F	10A
V_{RRM}	40V, 60V
I_{FSM}	100A
V_F	0.55V, 0.70V
T_J max	125°C

Features

- Guard Ring for over voltage Protection
- High forward surge capability
- High frequency operation
- Component in accordance to RoHS 2002/95/EC

Mechanical Data

- Case: TO-220SGB
- 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: 2.015 grams (approximate)

MAXIMUM RATINGS (TA=25°C unless otherwise noted)				
PARAMETER	SYMBOL	SR1045SGB	SR1060SGB	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	45	60	V
Maximum RMS voltage	V_{RMS}	31.5	42	V
Maximum DC blocking voltage	V_{DC}	45	60	V
Maximum average forward rectified current (Total) (Per Leg)	I_F	10 5		A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100		A
Maximum Instantaneous Forward Voltage $I_F=5A @ 25°C$	V_F	0.55	0.7	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C	I_R	0.5 20		mA
Typical Junction Capacitance(NOTE1)	C_j	140		pF
Typical Thermal Resistance	$R_{\theta JC}$	3		°C/W
Operating Temperature Range	T_J	-55 to +125		°C
Storage Temperature Range	T_{STG}	-55 to +150		°C

NOTES:

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



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FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

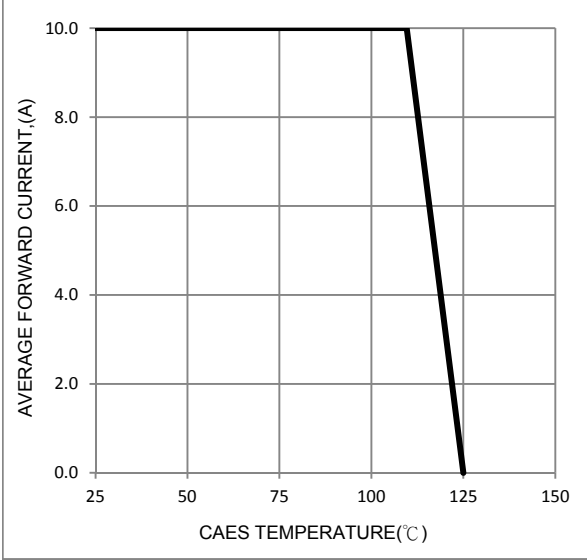


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

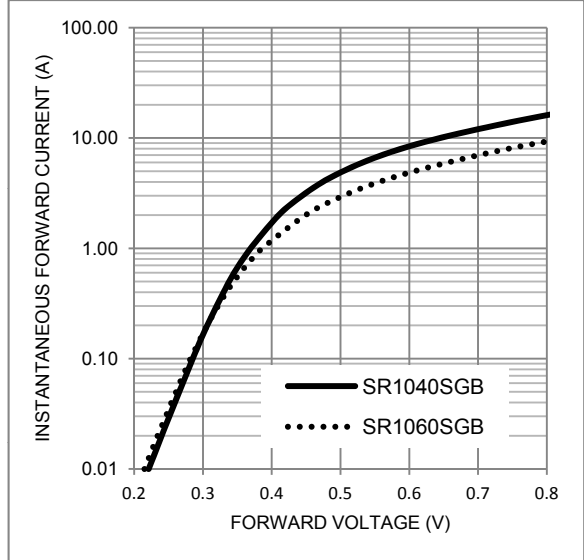


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

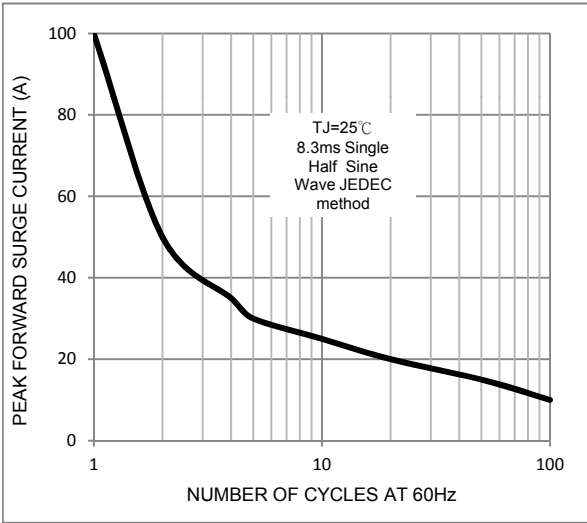


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

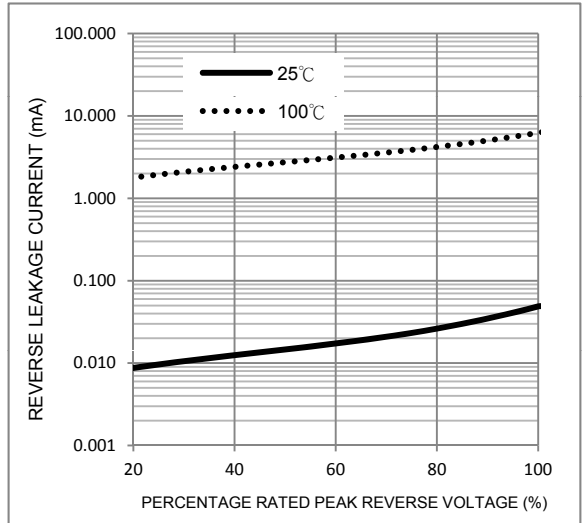


FIG. 5-TYPICAL JUNCTION CAPACITANCE

