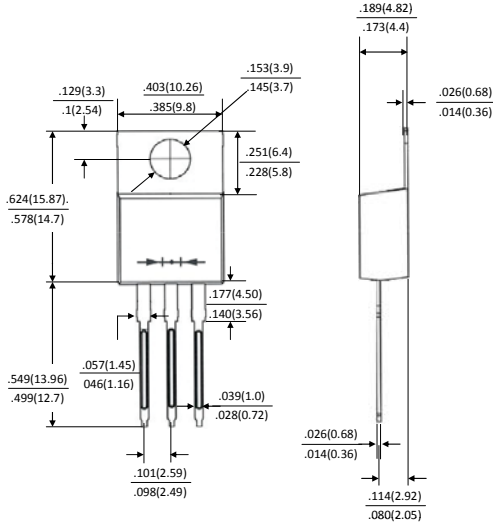




# SR2045SGB thru SR2060SGB



## Schottky Barrier Rectifiers



### TO-220SGB

Dimensions in inches and (millimeters)



Ordering Information	
Part Number	Remark
SR20x0SGB	General
SR20x0SGB-H	Halogen Free

PRIMARY CHARACTERISTICS	
$I_F$	20A
$V_{RRM}$	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	SR2045SGB	SR2060SGB	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)	$I_F$	20 10		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)	$C_j$	350		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



# SR2045SGB thru SR2060SGB



## Schottky Barrier Rectifiers

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

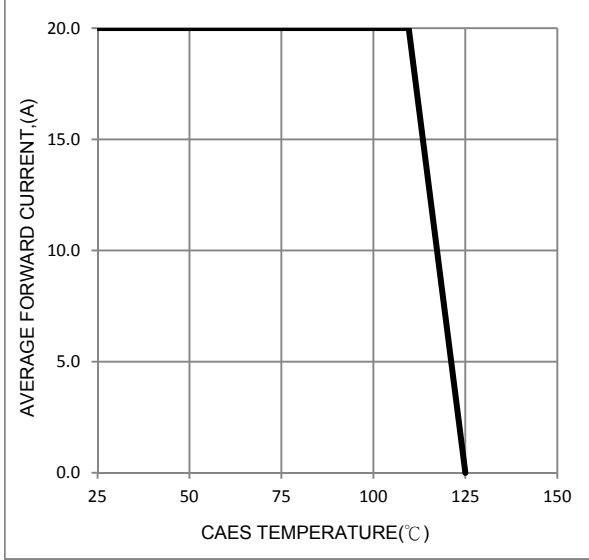


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

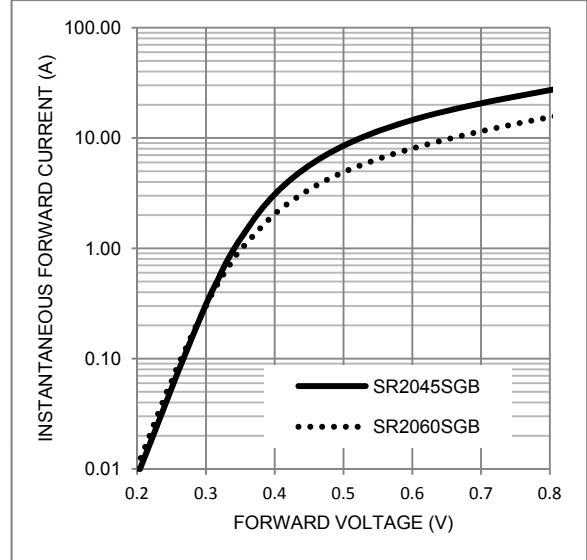


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

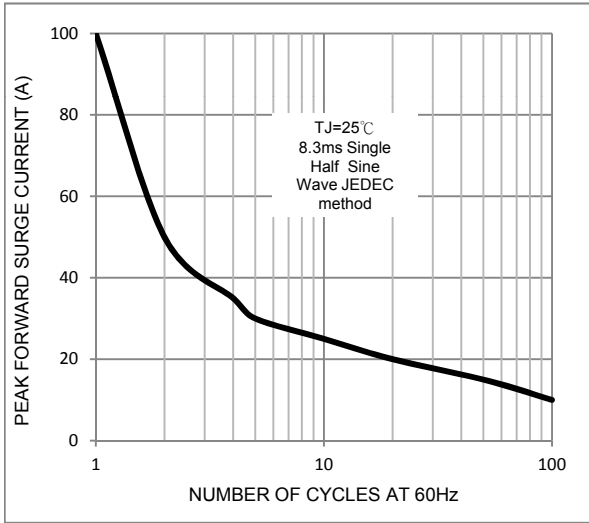


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

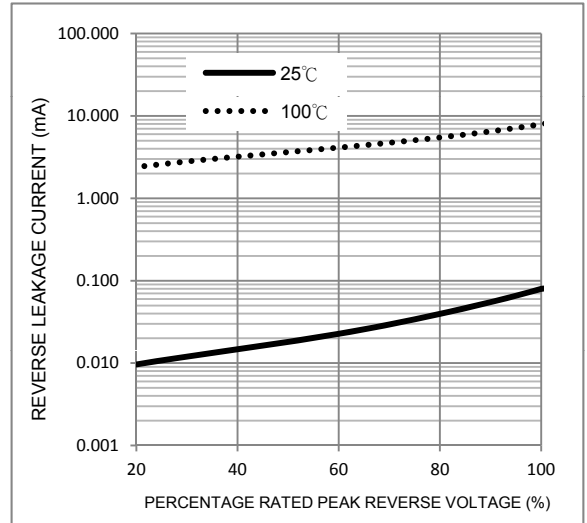


FIG. 5-TYPICAL JUNCTION CAPACITANCE

