

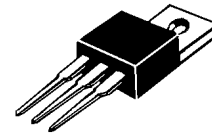
Switchmode Dual Schottky Barrier Power Rectifiers

Using the Schottky Barrier principle with a Refractory metal capable of high temperature operation metal. The proprietary barrier technology allows for reliable operation up to 175 °C junction temperature. Typical application are in switching Mode Power Supplies such as adaptators, DC/DC convertes, free-wheeling and polarity protection diodes.

Features

- * Low Forward Voltage.
- * Low Switching noise.
- * High Current Capacity
- * Guarantee Reverse Avalanche.
- * Guard-Ring for Stress Protection.
- * Low Power Loss & High efficiency.
- * 175 °C Operating Junction Temperature
- * Low Stored Charge Majority Carrier Conduction.
- * Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-0
- * ESD: 4KV(Min.) Human-Body Model

* *In compliance with EU RoHs 2002/95/EC directives*



TO-220

MAXIMUM RATINGS

Characteristic	Symbol	SBR2060CL	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	42	V
Average Rectifier Forward Current (per diode) Total Device (Rated V_R), $T_C=100$	$I_{F(AV)}$	10 20	A
Peak Repetitive Forward Current (Rate V_R , Square Wave, 20kHz)	I_{FM}	20	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I_{FSM}	175	A
Operating and Storage Junction Temperature Range	T_J, T_{stg}	-65 to +175	

THERMAL RESISTANCES

Typical Thermal Resistance junction to case	$R_{\theta j-c}$	3.2	/w
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ELECTRIAL CHARACTERISTICS

Characteristic	Symbol	SBR2060CL			Unit
		Min	Typ.	Max.	
Maximum Instantaneous Forward Voltage (per diode) ($I_F = 0.1$ Amp $T_C = 25$) ($I_F = 5.0$ Amp $T_C = 25$) ($I_F = 10$ Amp $T_C = 25$)	V_F	---	0.31 0.53 0.66	0.35 0.58 0.85	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25$) (Rated DC Voltage, $T_C = 125$)	I_R	---	0.08 15	0.1 30	mA

FIG-1 FORWARD CURRENT DERATING CURVE

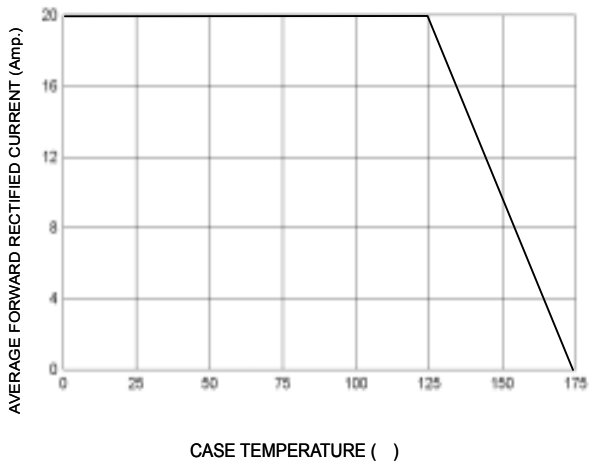


FIG-2 TYPICAL FORWARD CHARACTERISTICS

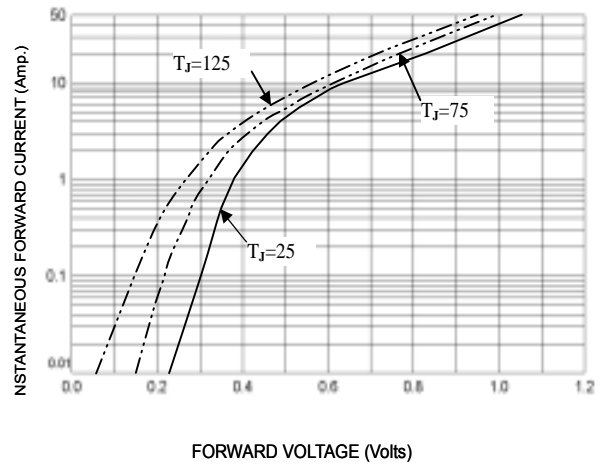


FIG-3 TYPICAL REVERSE CHARACTERISTICS

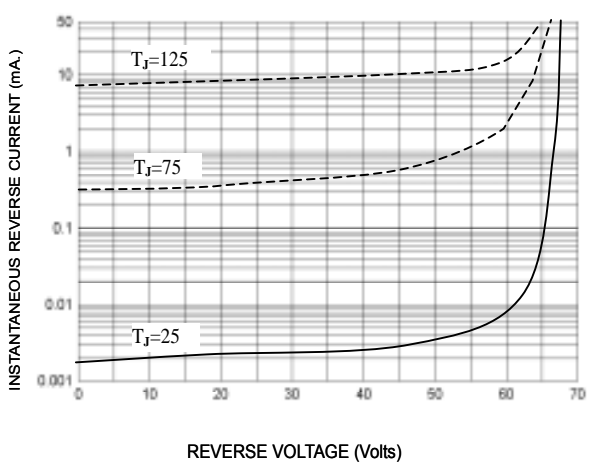


FIG-4 TYPICAL JUNCTION CAPACITANCE

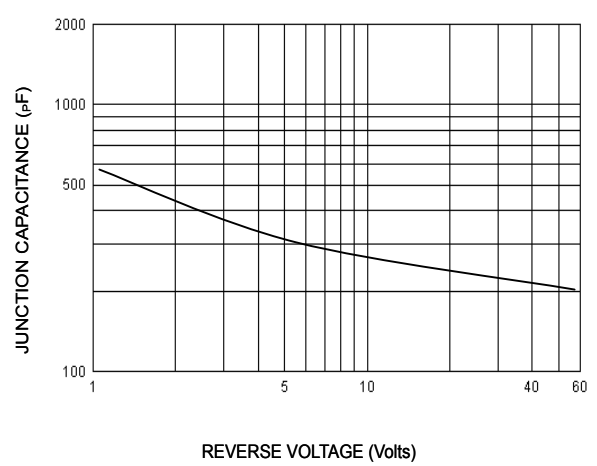
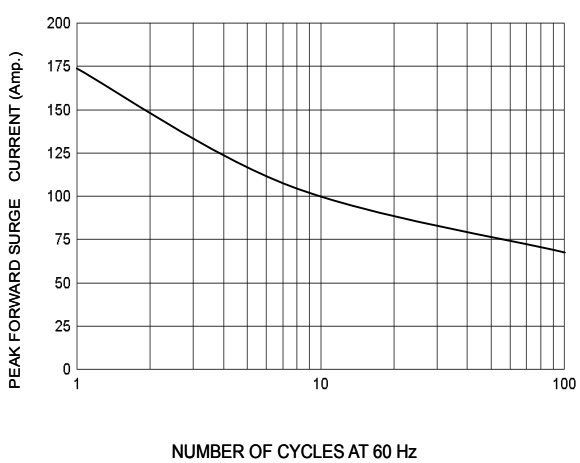


FIG-5 PEAK FORWARD SURGE CURRENT



封装说明: (Package description)

DIM	MILLIMETERS	
	MIN	MAX
A	14.45	16.00
B	9.60	10.42
C	5.02	6.52
D	13.05	14.62
E	3.57	4.07
F	2.39	2.69
G	1.10	1.40
H	0.70	0.96
I	4.22	4.98
J	1.14	1.38
K	2.20	2.98
L	0.32	0.55
M	2.40	3.00
O	3.50	4.00

