

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

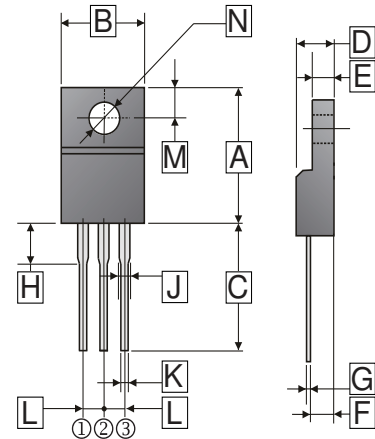
FEATURES

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Epitaxial Construction

MECHANICAL DATA

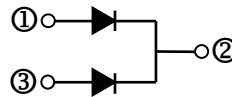
- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any

ITO-220



ORDER INFORMATION

Part Number	Type
SBR3060RF	Lead (Pb)-free
SBR3060RF-C	Lead (Pb)-free and Halogen-free



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.40	16.50	H	3.10	4.50
B	9.50	10.72	J	0.80	1.80
C	12.58	14.22	K	0.30	0.95
D	3.90	5.10	L	1.80	2.95
E	2.10	3.56	M	2.15	3.60
F	2.10	3.20	N	φ 2.60	φ 3.80
G	0.30	0.80			

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

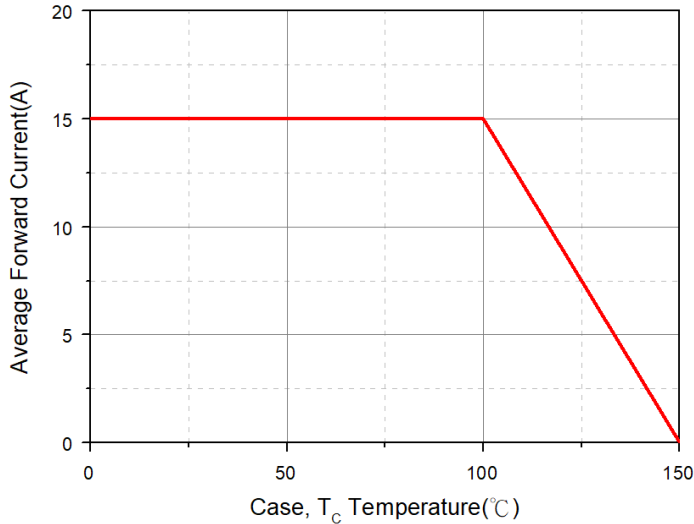
Parameter	Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	60	V
Working Peak Reverse Voltage	V_{RSM}	60	V
Maximum DC Blocking Voltage	V_{DC}	60	V
Maximum Average Forward Rectified Current	Per Leg	15	A
	Per Device	30	
Peak Forward Surge Current, 8.3ms single half sine-wave Superimposed on rated load (JEDEC method)	I_{FSM}	180	A
Maximum Instantaneous Forward Voltage @ $I_F=15A$	$T_J=25^\circ C$	0.68	V
	$T_J=125^\circ C$	0.62	
Maximum DC Reverse Current @ Rated DC Blocking Voltage ²	$T_J=25^\circ C$	0.5	mA
	$T_J=75^\circ C$	10	
Typical Junction Capacitance ¹	C_J	450	pF
Typical Thermal Resistance Junction-Case	$R_{\theta JC}$	4	°C/W
Operating Junction & Storage Temperature Range	T_J, T_{STG}	-55~150	°C

Notes:

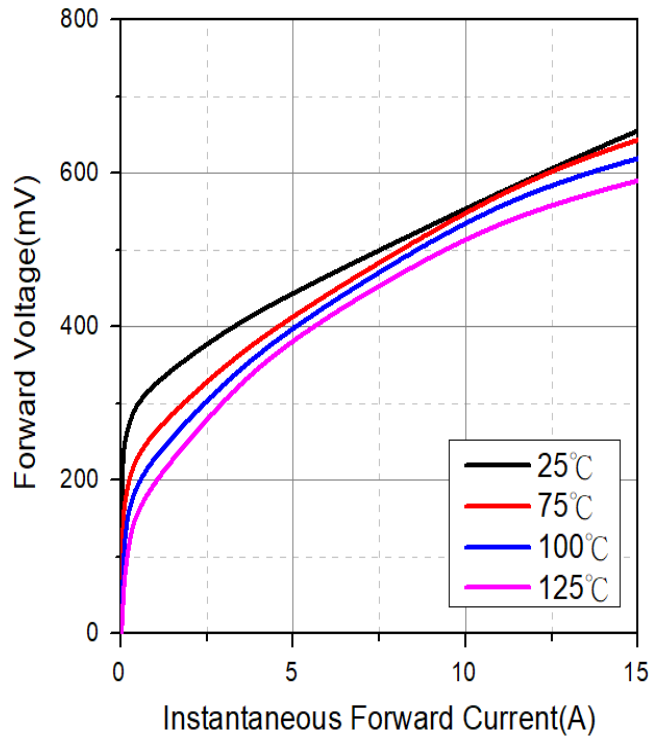
1. Measured at 1MHz and applied reverse voltage of 5V D.C.
2. Pulse Test: Pulse Width=300µs, Duty Cycle ≤2%.

RATINGS AND CHARACTERISTIC CURVES

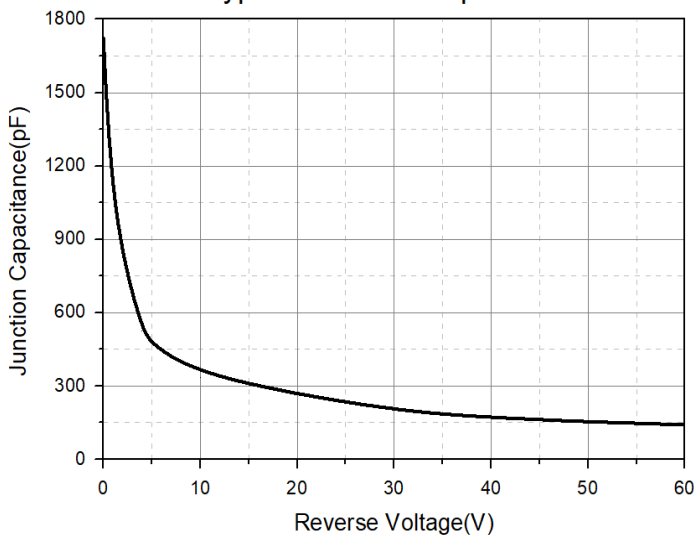
Typical Forward Current Derating Curve



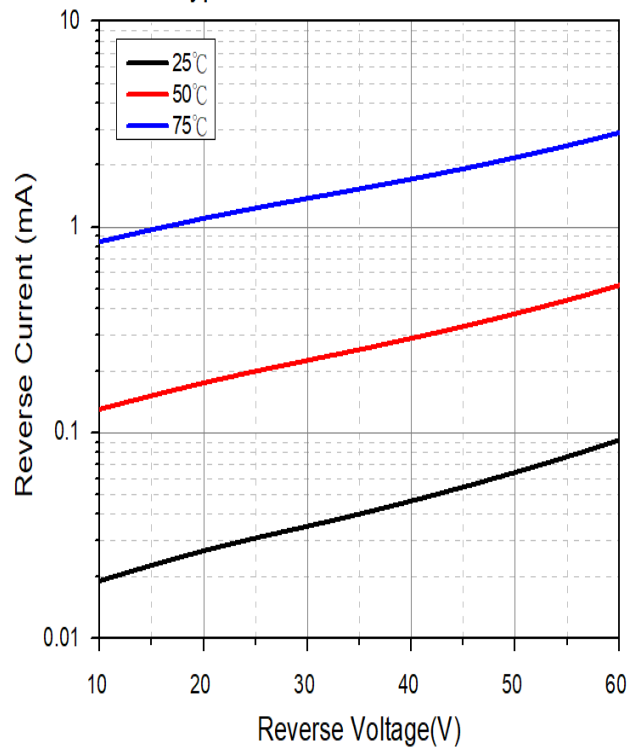
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

