

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

FEATURES

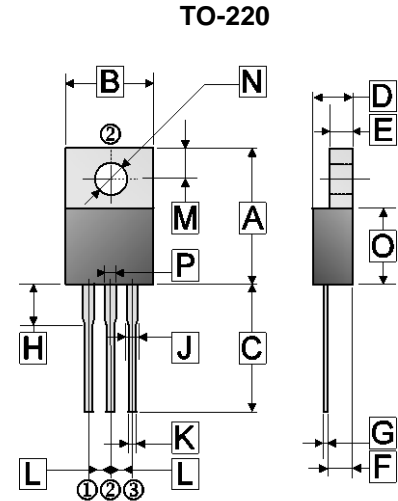
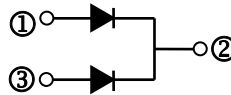
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Epitaxial Construction

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

ORDER INFORMATION

Part Number	Type
SBR30200R	Lead (Pb)-free
SBR30200R-C	Lead (Pb)-free and Halogen-free



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.22	16.51	J	0.70	1.78
B	9.57	10.90	K	0.38	1.11
C	12.50	14.75	L	2.01	3.07
D	3.56	5.10	M	2.22	3.43
E	0.51	1.47	N	3.10	4.31
F	2.03	3.19	O	8.10	9.65
G	0.279	0.76	P	1.18 TYP.	
H	2.95	4.5			

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%.)

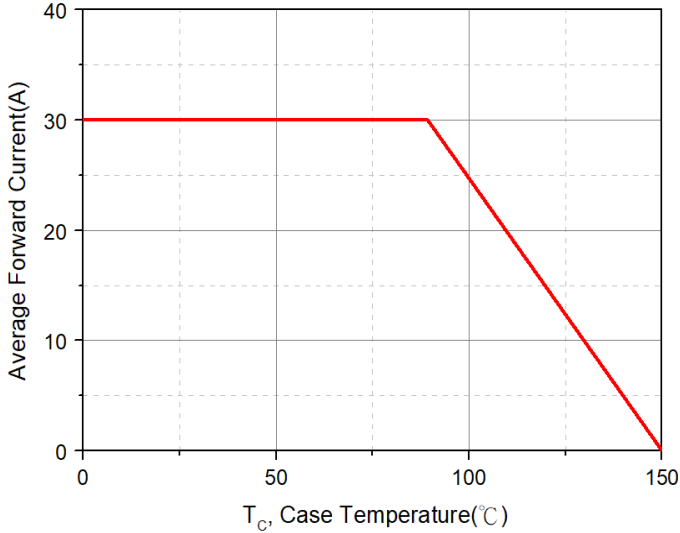
Parameter		Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	200	V
Working Peak Reverse Voltage		V_{RSM}	200	V
Maximum DC Blocking Voltage		V_{DC}	200	V
Maximum Average Forward Rectified Current	Per Leg	I_F	15	A
	Per Device		30	
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	180	A
Maximum Instantaneous Forward Voltage @ $I_F=15A$	$T_A=25^\circ C$	V_F	0.92	V
	$T_A=125^\circ C$		0.8	
Maximum DC Reverse Current ² at Rated DC Blocking Voltage	$T_A=25^\circ C$	I_R	0.02	mA
	$T_A=125^\circ C$		3	
Typical Junction Capacitance ¹		C_J	405	pF
Typical Thermal Resistance	$R_{\theta JA}$		10	°C/W
	$R_{\theta JC}$		2	
Voltage Rate Of Change (Rated V_R)		dv/dt	10000	V/ μs
Operating Temperature Range		T_J	-50~150	°C
Storage Temperature Range		T_{STG}	-65~175	

Notes:

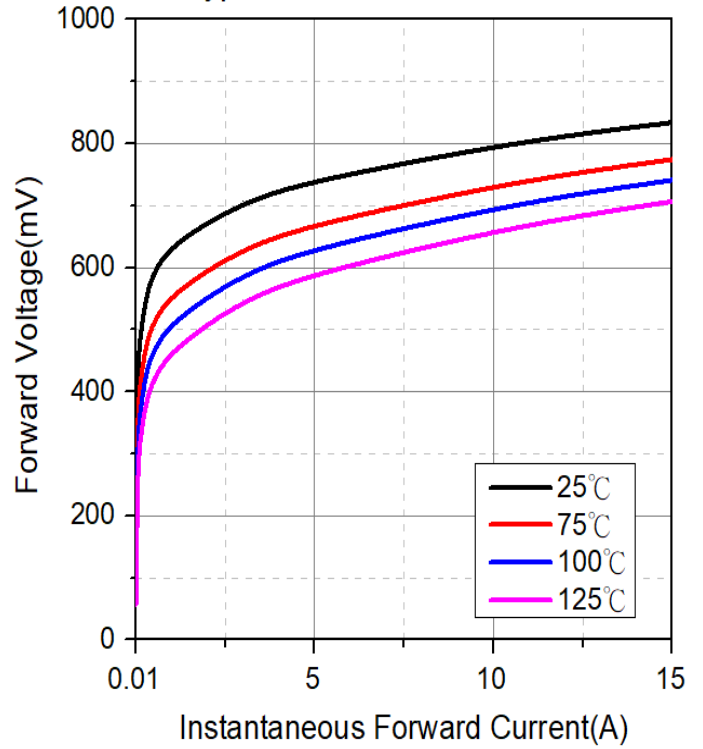
1. Measured at 1MHz and applied reverse voltage of 1V D.C.
2. Pulse test: 300uS pulse width, 1% duty cycle.

RATINGS AND CHARACTERISTIC CURVES

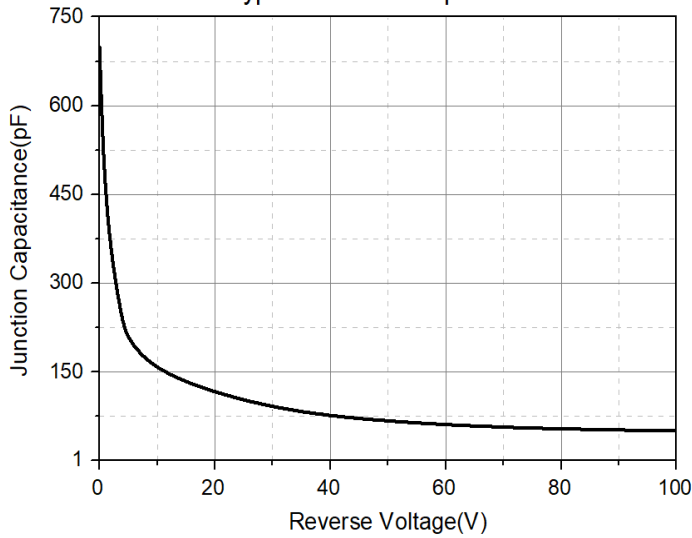
Typical Forward Current Derating Curve



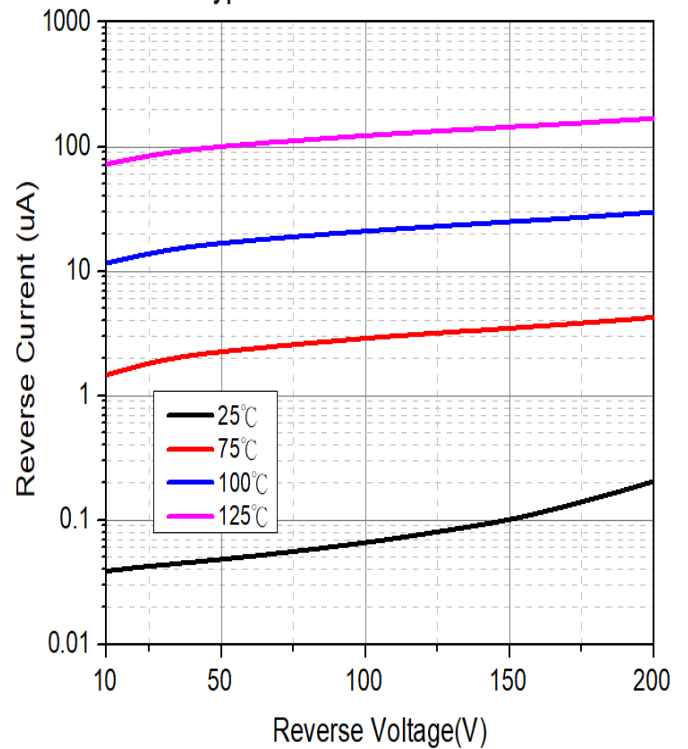
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

