

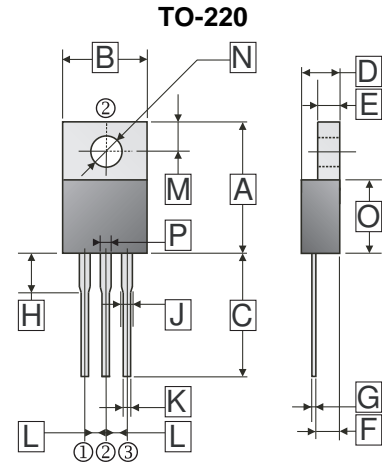
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

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

MECHANICAL DATA

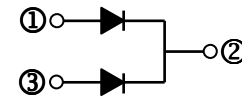
- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any



ORDER INFORMATION

Part Number	Type
SBR30150R	Lead (Pb)-free
SBR30150R-C	Lead (Pb)-free and Halogen-free

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.22	16.51	J	1.09	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	1.17	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	Q	5.8	6.8



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%.)

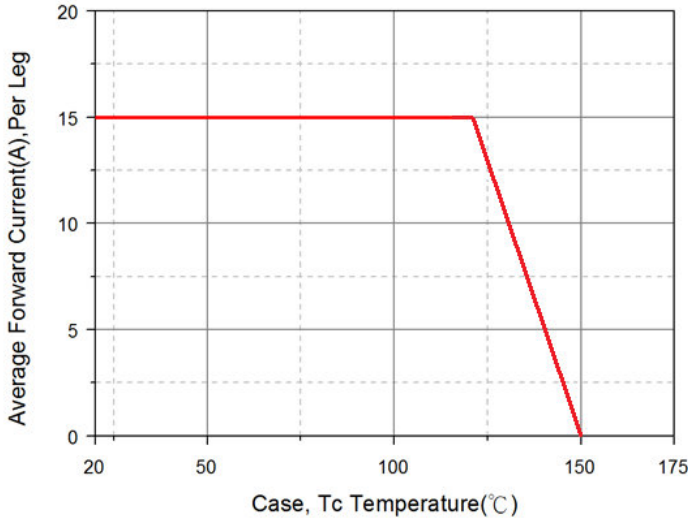
Parameter	Symbol	Ratings	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	150	V
Working Peak Reverse Voltage	V_{RSM}	150	V
Maximum DC Blocking Voltage	V_{DC}	150	V
Maximum Average Forward Rectified Current	Per Leg	15	A
	Per Device	30	
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	180	A
Maximum Instantaneous Forward Voltage @ $I_F=15A$, per leg	$T_A=25^\circ C$	0.88	V
	$T_A=125^\circ C$	0.76	
Maximum DC Reverse Current @Rated DC Blocking Voltage ²	$T_A=25^\circ C$	0.2	mA
	$T_A=125^\circ C$	5	
Typical Junction Capacitance ¹	C_J	350	pF
Typical Thermal Resistance Junction-Case	$R_{\theta JC}$	2	°C/W
Typical Thermal Resistance Junction-Ambient	$R_{\theta JA}$	10	°C/W
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	°C

Notes:

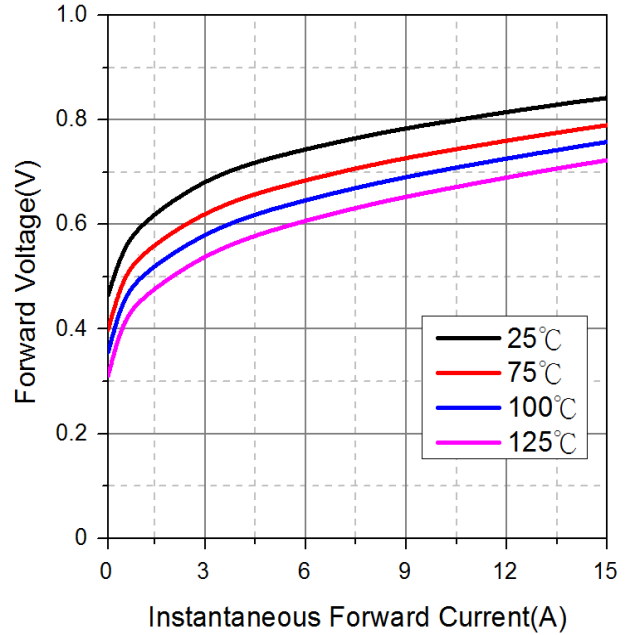
1. Measured at 1MHz and applied reverse voltage of 5V D.C.
2. Pulse test: 300 μS pulse width, 1% duty cycle.

RATINGS AND CHARACTERISTIC CURVES

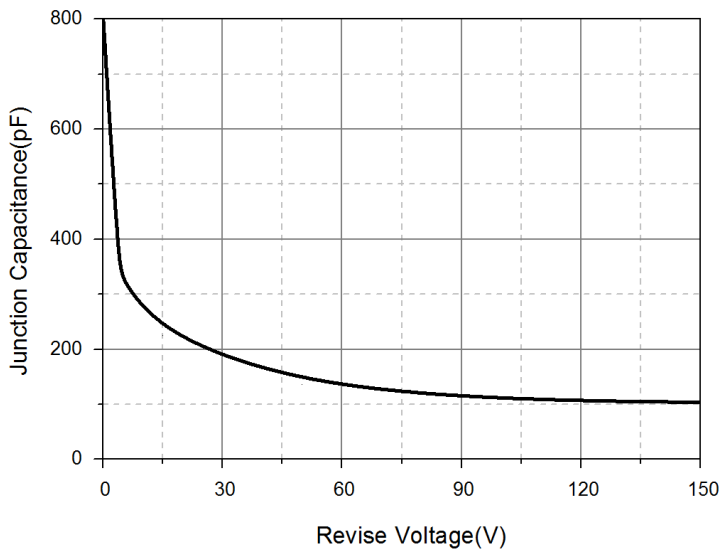
Typical Forward Current Derating Curve



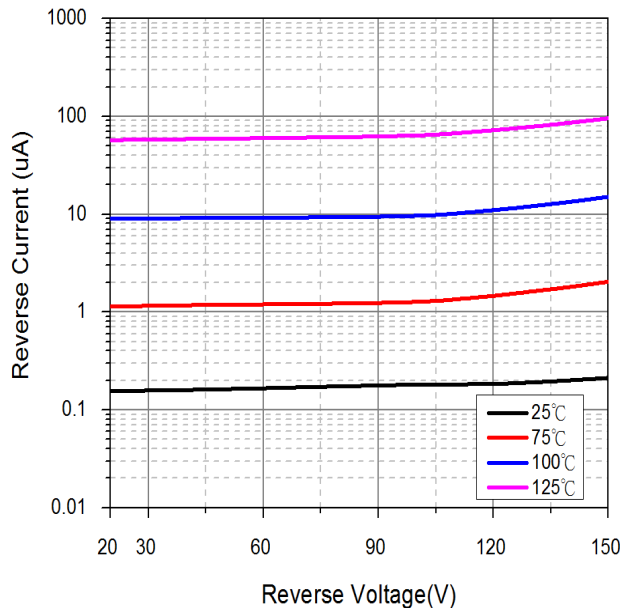
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

