

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

FEATURES

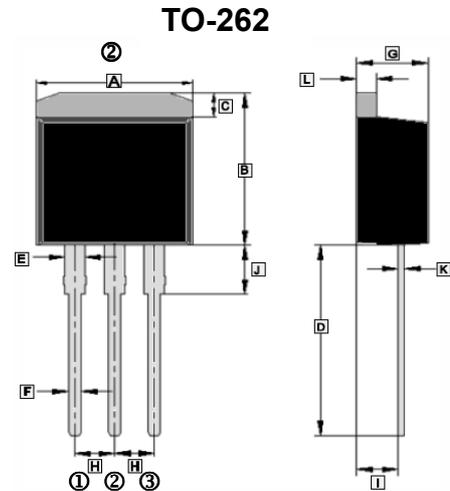
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Epitaxial Construction

MECHANICAL DATA

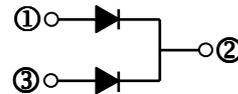
- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any

ORDER INFORMATION

Part Number	Type
SBR30150I	Lead (Pb)-free
SBR30150I-C	Lead (Pb)-free and Halogen-free



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	9.57	10.57	G	4.27	4.87
B	10.14	11.14	H	2.34	2.74
C	1.44	1.84	I	2.03	2.92
D	12.7	13.4	J	2.95	3.95
E	0.97	1.57	K	0.3	0.46
F	0.51	1.11	L	1.07	1.47



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%.)

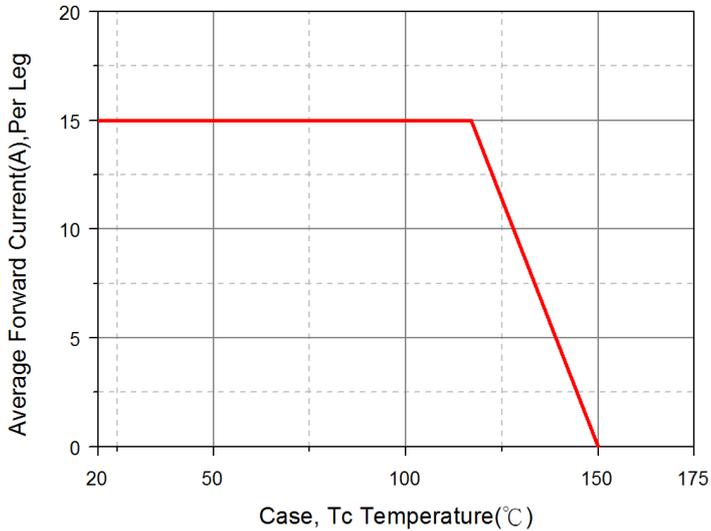
Parameter	Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	150	V
Working Peak Reverse Voltage	V_{RSM}	150	V
Maximum DC Blocking Voltage	V_{DC}	150	V
Maximum Average Forward Rectified Current	Per Leg	15	A
	Per Device	30	
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	180	A
Maximum Instantaneous Forward Voltage	$I_F=15A, T_A=25^\circ C$	0.88	V
	$I_F=15A, T_A=125^\circ C$	0.76	
Maximum DC Reverse Current at Rated DC Blocking Voltage ¹	$T_A=25^\circ C$	0.2	mA
	$T_A=125^\circ C$	5	
Voltage Rate Of Change (Rated V_R)	dv / dt	10000	V / μs
Typical Junction Capacitance ²	C_J	350	pF
Typical Thermal Resistance ³	$R_{\theta JC}$	2.5	°C / W
Operating and Storage Temperature Range	T_J, T_{STG}	150, -65~175	°C

Notes:

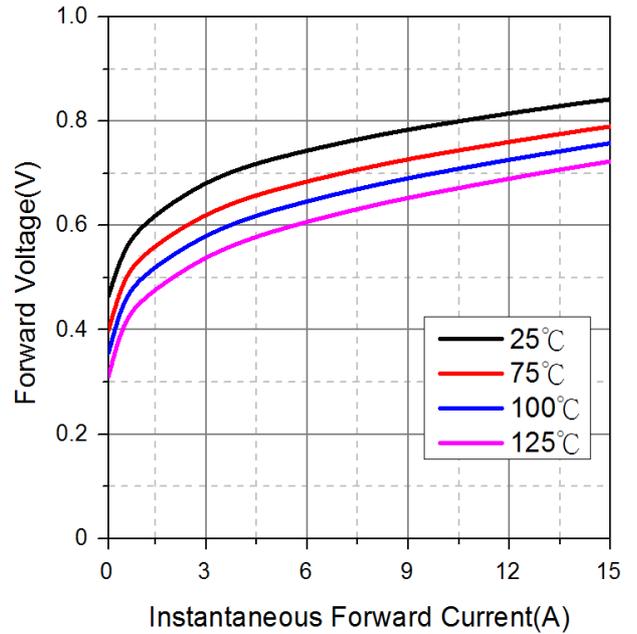
1. Pulse test: 300uS pulse width, 1% duty cycle.
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3. Thermal Resistance Junction to Case.

RATINGS AND CHARACTERISTIC CURVES

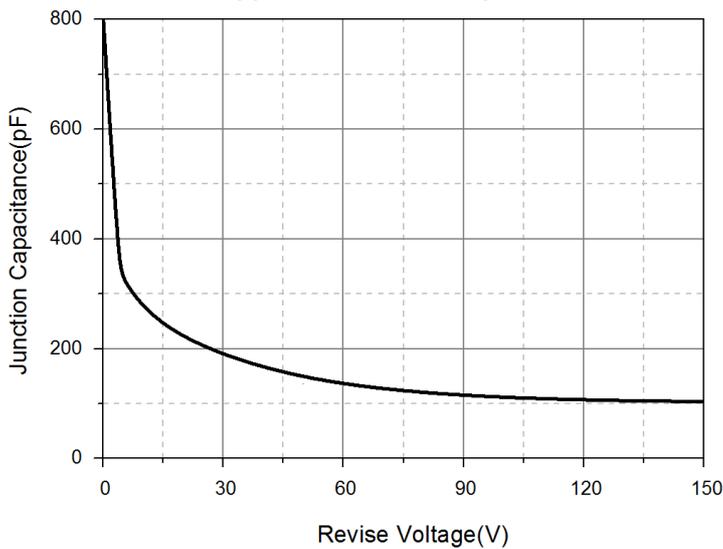
Typical Forward Current Derating Curve



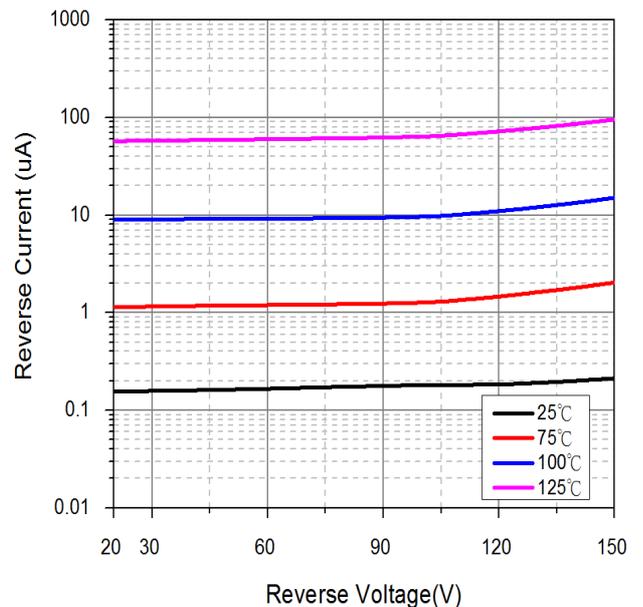
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

