

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

FEATURES

- High current capability
- High surge current capability
- Low reverse current
- Low forward voltage drop

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

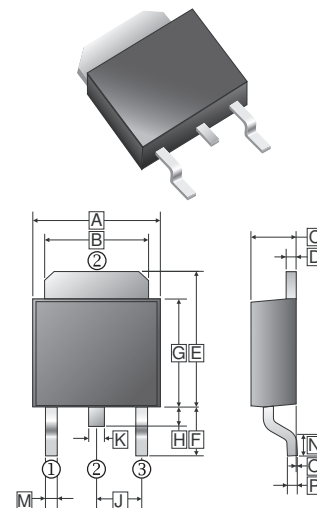
PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	13 inch

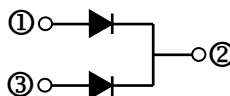
ORDER INFORMATION

Part Number	Type
SBL10A150D1-C	Lead (Pb)-free and Halogen-free

TO-252



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.3	6.9	J	2.3	REF.
B	4.95	5.53	K	0.89	REF.
C	2.1	2.5	M	0.45	1.14
D	0.4	0.9	N	1.55	Typ.
E	6	7.7	O	0	0.15
F	2.90	REF.	P	0.58	REF.
G	5.4	6.4			
H	0.6	1.2			



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}	105	
Maximum DC Blocking Voltage	V_{DC}	150	
Maximum Average Forward Rectified Current	Per Leg	5	A
	Per Device	10	
Maximum Instantaneous Forward Voltage	$I_F=3A$	0.79	V
	$I_F=5A$	0.85	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ C$	0.2	mA
	$T_A=100^\circ C$	50	
Peak Forward Surge Current, 8.3ms single half sine-wave Superimposed on rated load (JEDEC method)	I_{FSM}	80	A
Typical Junction Capacitance ¹	C_J	280	pF
Typical Thermal Resistance	$R_{\theta JC}$	10	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55~150	°C

Note:

1. Measured at 1MHz and applied reverse voltage of 4V D.C.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1-Typical Forward Current Derating Curve

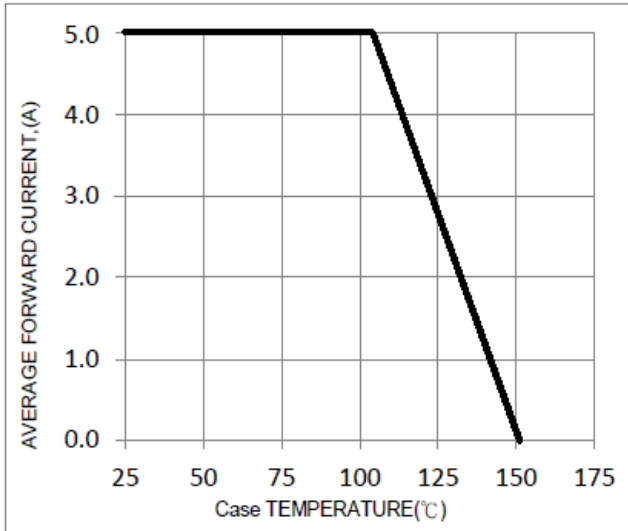


FIG. 2-Typical Forward Characteristics

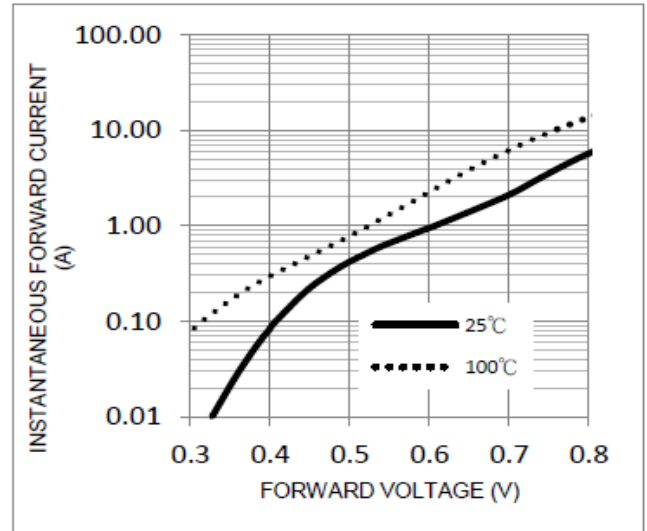


FIG. 3-Maximum Non-Repetitive Forward Surge Current

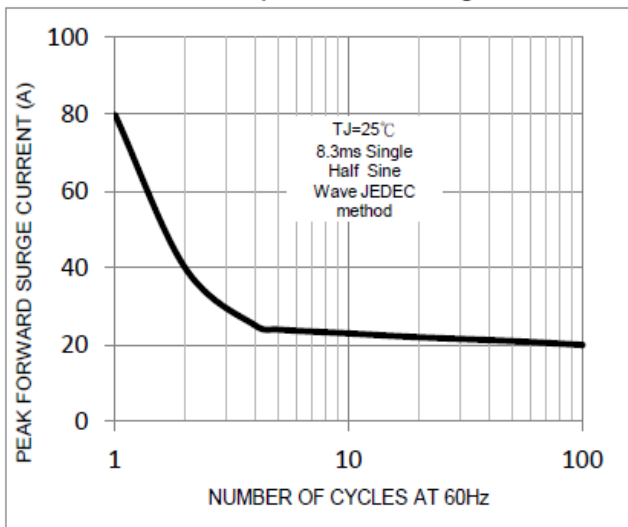


FIG. 4-Typical Reverse Characteristics

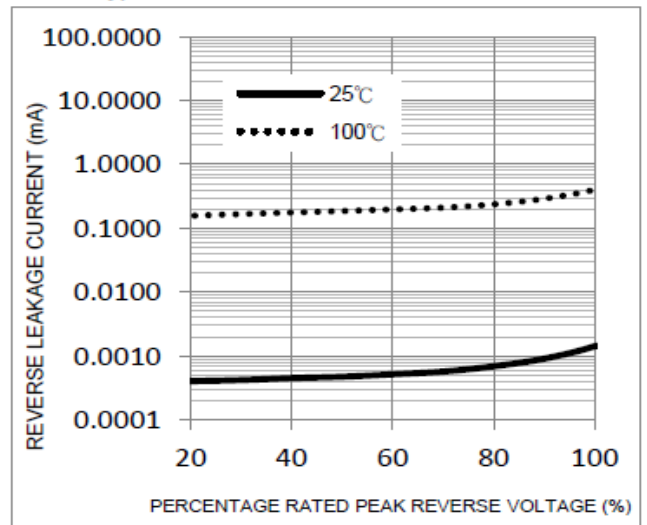


FIG. 5-Typical Junction Capacitance

