

10 A Schottky Barrier Rectifier
Rectifier Reverse Voltage 30 to 60V

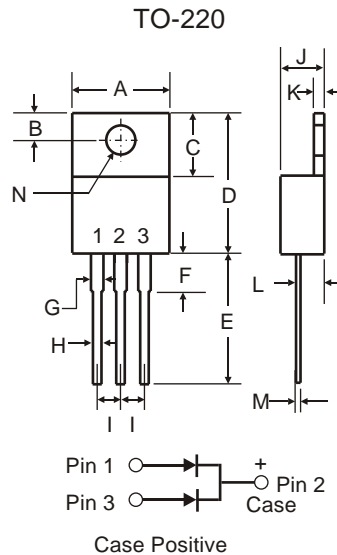


Features

- Extremely low VF
- Epitaxial construction
- Low power loss, high efficiency
- Low stored charge, majority carrier construction
- Plastic material has UL flammability classification 94V-0

Mechanical Data

Case: Molded plastic
 Terminals: Solder plated solderable per MIL-STD-202, Method 208
 Polarity: As marked on body
 Mounting Position: Any
 Weight: 2.3 grams (approx)



Dim	Min	Max
A	9.65	10.67
B	2.54	3.43
C	5.84	6.86
D	14.22	15.88
E	12.70	14.73
F	—	4.06
G	—	1.80
H	0.51	1.14
I	2.29	2.79
J	3.56	4.83
K	1.14	1.40
L	2.50	3.39
M	0.30	0.64
N	∅3.53	∅4.09

All dimensions in mm

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
 For Capacitive load derate current by 20%.

Parameter	Symbol	SBL 1030CT	SBL 1035CT	SBL 1040CT	SBL 1045CT	SBL 1050CT	SBL 1060CT	unit
Maximum recurrent peak reverse voltage	VRRM	30	35	40	45	50	60	V
Maximum RMS voltage	VRMS	21	24.5	28	31.5	35	42	V
Maximum DC blocking voltage	VDC	30	35	40	45	50	60	V
Maximum average forward rectified current 9.5 mm lead length (see fig.1)	IF(AV)	10						A
Peak forward surge current, single sine-wave superimposed on rated load (JEDEC Method)	IFSM	175						A
Typical thermal resistance	ReJA	3.0						°C/W
Typical junction capacitance	Cj	450						pF
Operating junction temperature range	TJ	-55 to + 125						°C
Storage temperature range	TSTG	-55 to + 150						°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
 For Capacitive load derate by 20 %.

Parameter	Symbol	SBL 1030CT	SBL 1035CT	SBL 1040CT	SBL 1045CT	SBL 1050CT	SBL 1060CT	Unit
Maximum instantaneous forward voltage drop at 5.0A	VF	0.55				0.70		V
Maximum DC reverse current at rated DC blocking voltage per element	IR	0.5 50.0						mA

Rating and Characteristic Curves ($T_A=25^{\circ}\text{C}$ Unless otherwise noted) SBL1030CT thru SBL1060CT

Fig. 1 Forward Current Derating Curve

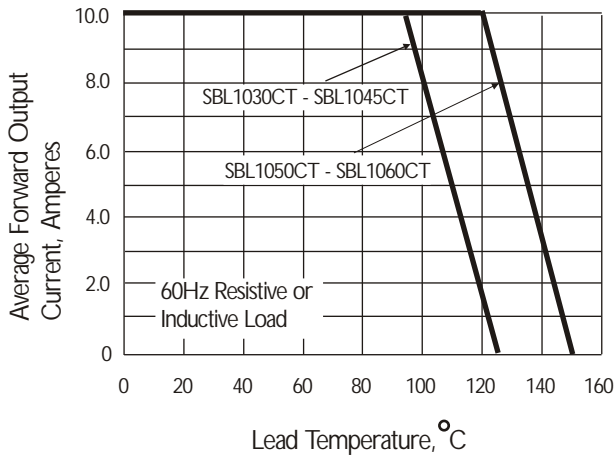


Fig. 2 Maximum Non-repetitive Forward Surge Current

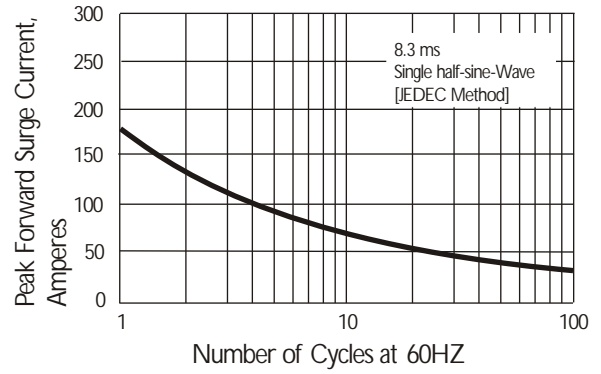


Fig. 3 Typical Instantaneous Forward Characteristics

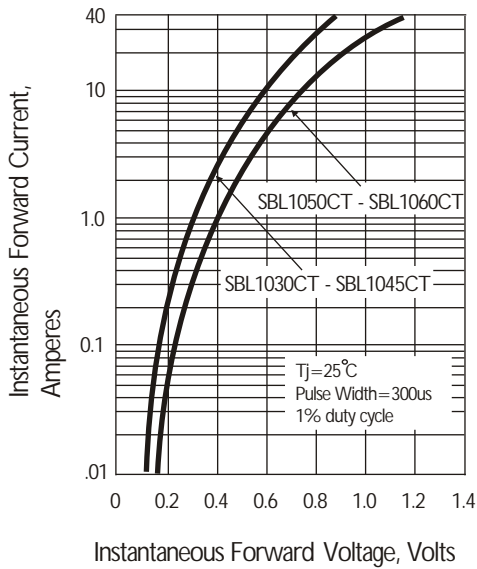


Fig. 4 Typical Reverse Characteristics

