



SEP ELECTRONIC CORP.

SBL1630CT thru SBL1660CT**16 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

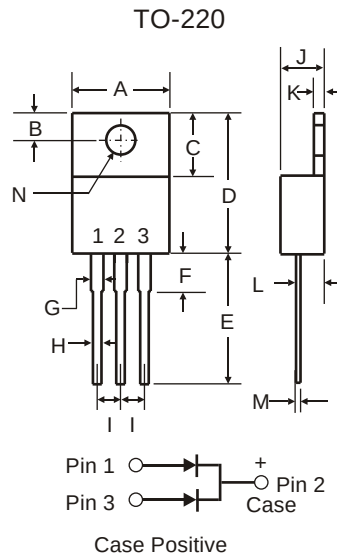
Case: Molded plastic

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

Parameter	Symbol	SBL 1630CT	SBL 1635CT	SBL 1640CT	SBL 1645CT	SBL 1650CT	SBL 1660CT	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 (see fig.1)	IF(AV)	16						A
Peak forward surge current, single sine-wave superimposed on rated load (JEDEC Method)	IFSM	250						A
Typical thermal resistance	ReJA	3.0						°C/W
Typical junction capacitance	Cj	700						pF
Operating junction temperature range	TJ	-55 to + 125						°C
Storage temperature range	TSTG	-55 to + 150						°C

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

Parameter	Symbol	SBL 1630CT	SBL 1635CT	SBL 1640CT	SBL 1645CT	SBL 1650CT	SBL 1660CT	Unit
Maximum instantaneous forward voltage drop at 8.0A	VF	0.55				0.70		V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =100°C	IR	0.5 50.0						mA

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

SBL1630CT thru SBL1660CT

Fig. 1 Forward Current Derating Curve

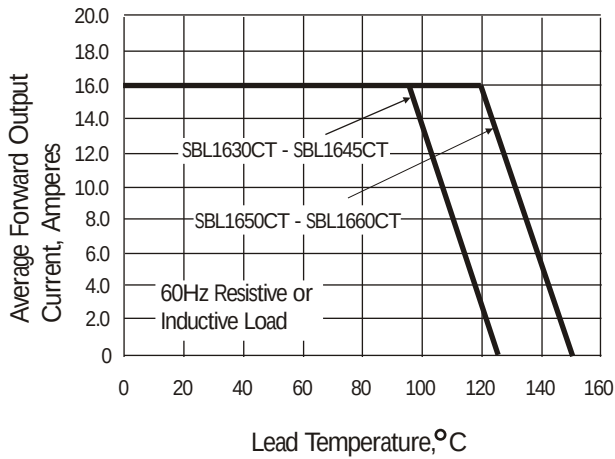


Fig. 2 Maximum Non-repetitive Forward Surge Current

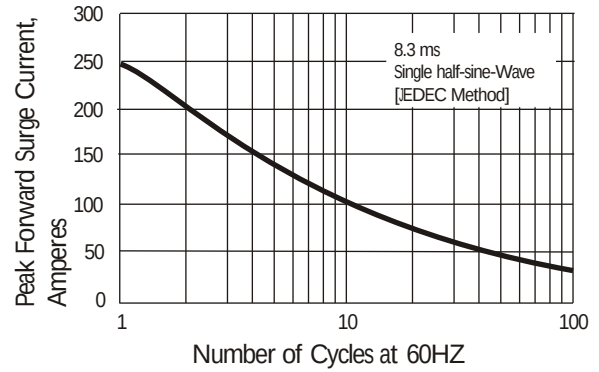


Fig. 3 Typical Instantaneous Forward Characteristics

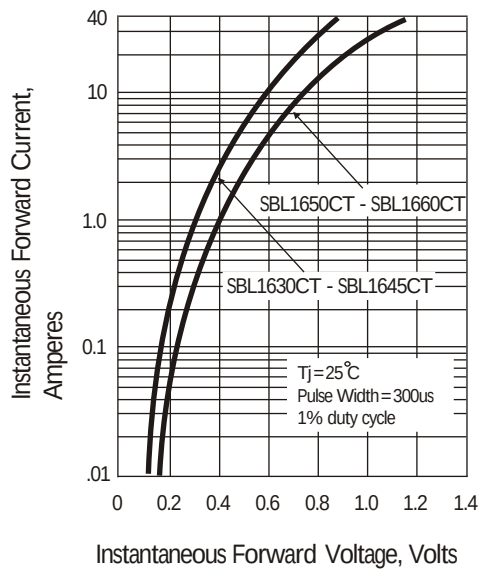


Fig. 4 Typical Reverse Characteristics

