

30 A Schottky Barrier Rectifier

Rectifier Reverse Voltage 30 to 60V

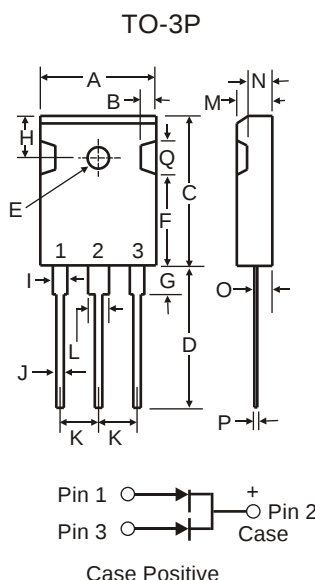


Features

- 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: 5.60 grams (approx)



Dim	Min	Max
A	15.9	16.4
B	1.7	2.7
C	20.8	21.3
D	19.7	20.2
E	∅2.9	∅3.4
F	11.7	12.8
G	3.50	4.51
H	5.7	6.2
I	2.9	3.3
J	1.12	1.22
K	5.2	5.7
L	2.97	3.22
M	4.59	5.16
N	3.2	3.5
O	2.73	3.03
P	0.51	0.76
Q	4.3 Typical	
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 3030PT	SBL 3035PT	SBL 3040PT	SBL 3045PT	SBL 3050PT	SBL 3060PT	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 at Tc=90 °C	IF(AV)	30						A
Peak forward surge current, single sine-wave superimposed on rated load (JEDEC Method)	IFSM	275						A
Typical thermal resistance	ReJA	2.0						°C/W
Typical junction capacitance	Cj	1100						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 3030PT	SBL 3035PT	SBL 3040PT	SBL 3045PT	SBL 3050PT	SBL 3060PT	Unit
Maximum instantaneous forward voltage drop at 15.0A	VF	0.55				0.70		V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =100°C	IR	1.0 75						mA

Rating and Characteristic Curves ($T_A = 25^{\circ}\text{C}$ Unless otherwise noted) SBL3030PT thru SBL3060PT

Fig. 1 Forward Current Derating Curve

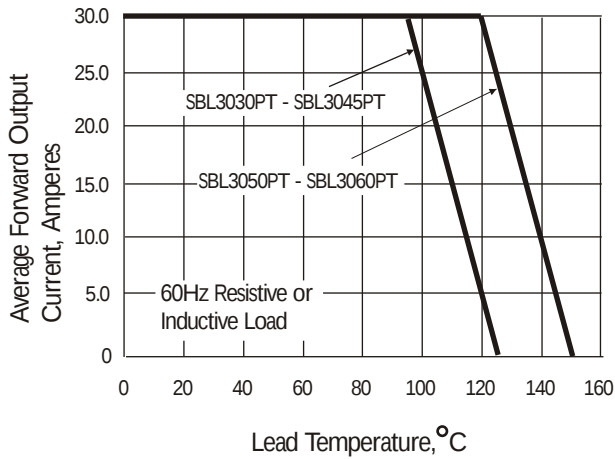


Fig. 2 Maximum Non-repetitive Forward Surge Current

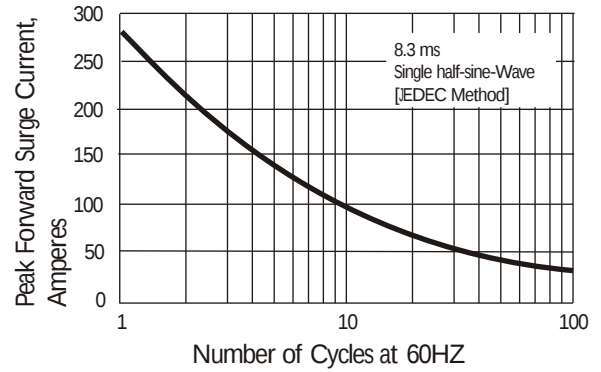


Fig. 3 Typical Instantaneous Forward Characteristics

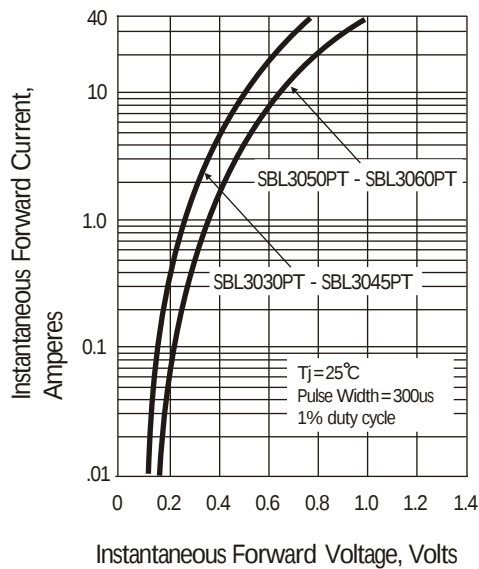


Fig. 4 Typical Reverse Characteristics

