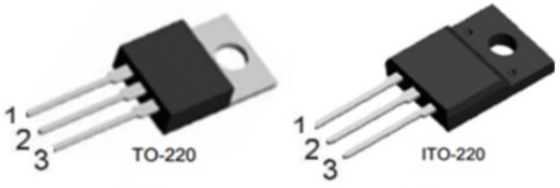
迪一電子®

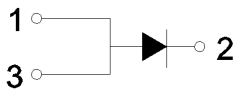
SBT30V100CS
SBT30V100FS

30A LOW VF SCHOTTKY RECTIFIER

Features

- Ultra Low Forward Voltage Drop
- Excellent High Temperature Stability
- Patented Super Barrier Rectifier Technology
- Soft, Fast Switching Capability





Mechanical Data

- Case: TO-220AA, ITO-220AA
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208

Ordering Information

Part No.	Package	Packing
SBT30V100CS	TO-220AA	50pcs / Tube
SBT30V100FS	ITO-220AA	50pcs / Tube

MAXIMUM RATINGS(T_A=25°C unless otherwise noted)

PARAMETER		SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage		V_{RRM}	100	V
Maximum rms voltage		V_{RMS}	70	V
Maximum average forward rectified current	per device per diode	$I_{F(AV)}$	30 15	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	per diode	I_{FSM}	250	A
Typical thermal resistance per diode	(Note 1)	$R_{\Theta JC}$	2.8	°C/W
Operating junction temperature range		T_J	-55 to + 150	°C
Storage temperature range		T_{STG}	-55 to + 150	°C

Note : 1. Mounted on infinite heatsink.

ELECTRICAL CHARACTERISTICS(T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Breakdown voltage per diode	V_{BR}	I_R=0.5mA		100	-	-	V
Instantaneous forward voltage per diode	V_F	I_F=5A I_F=10A I_F=15A	T_J=25°C	- - -	0.46 0.52 0.68	- - 0.75	V
		I_F=5A I_F=10A	T_J=125°C	- -	0.44 0.56	- -	V
Reverse current per diode	I_R	V_R=100V	T_A=25°C T_A=100°C	- -	- -	100 40	μA mA

RATING AND CHARACTERISTIC CURVES

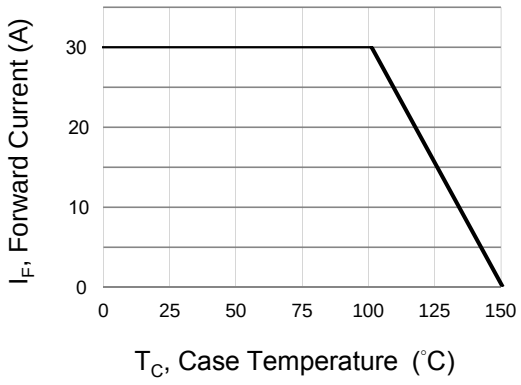


Fig.1 Forward Current Derating Curve

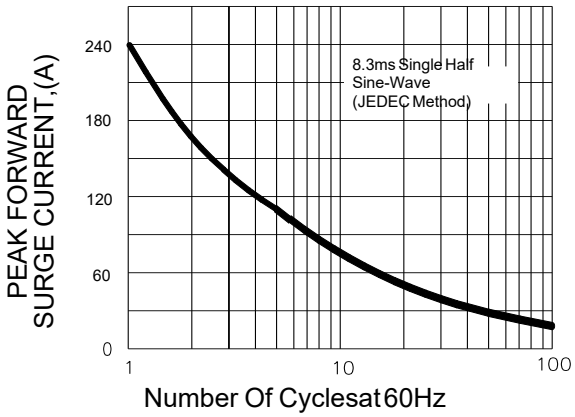


Fig.2 Maximun Non-Repetitive Forward Surge Current

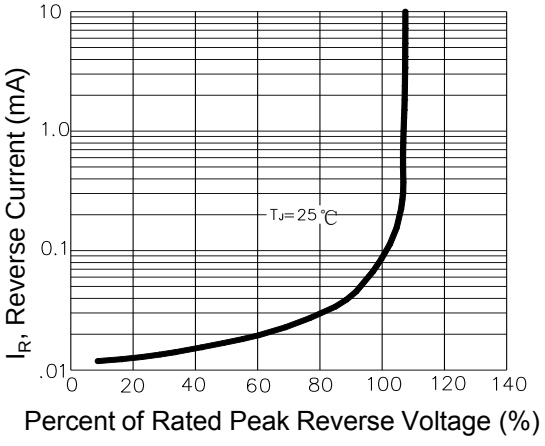


Fig.3 Typical Reverse Characteristics

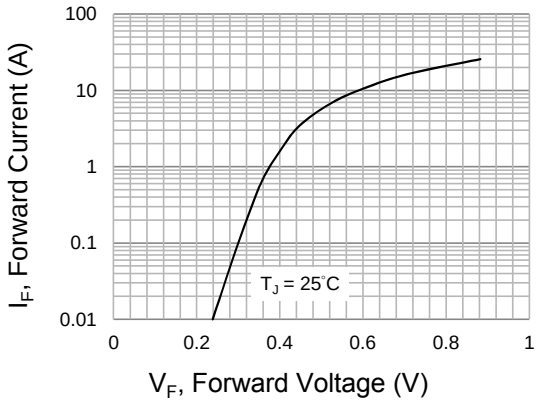
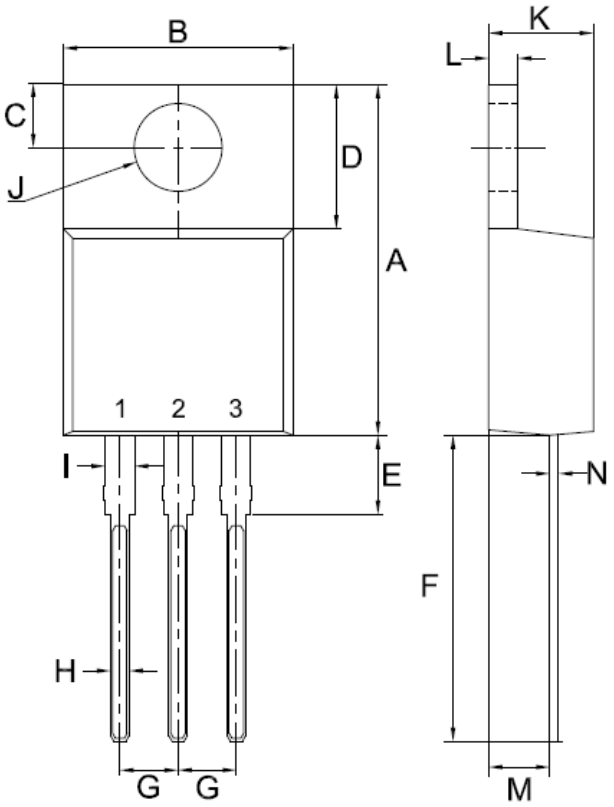


Fig.4 Typical Forward Characteristics

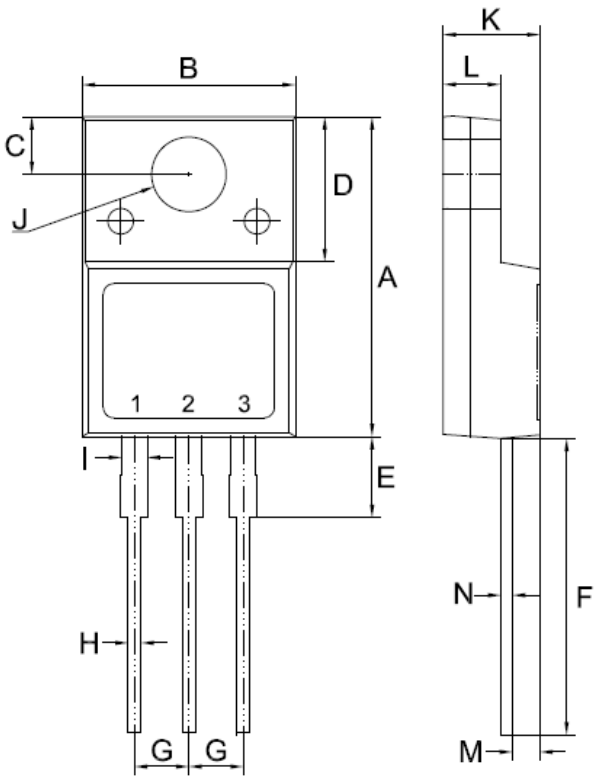
Package Outline Dimensions



TO-220AB

Unit:mm

DIM	MIN	MAX
A	14.80	15.80
B	9.57	10.57
C	2.54	2.94
D	5.80	6.80
E	2.95	3.95
F	12.70	13.40
G	2.34	2.74
H	0.51	1.11
I	0.97	1.57
J	3.54ϕ	4.14ϕ
K	4.27	4.87
L	1.07	1.47
M	2.03	2.92
N	0.30	0.64



ITO-220AB

Unit:mm

DIM	MIN	MAX
A	14.50	15.50
B	9.50	10.50
C	2.50	2.90
D	6.30	7.30
E	3.30	4.30
F	13.00	14.00
G	2.35	2.75
H	0.30	0.90
I	0.90	1.50
J	3.20	3.80
K	4.24	4.84
L	2.52	2.92
M	1.09	1.49
N	0.47	0.64

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