



SBP20L60CT THRU SBP20L60CG

20A LOW VF SCHOTTKY RECTIFIER

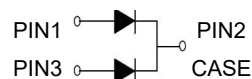
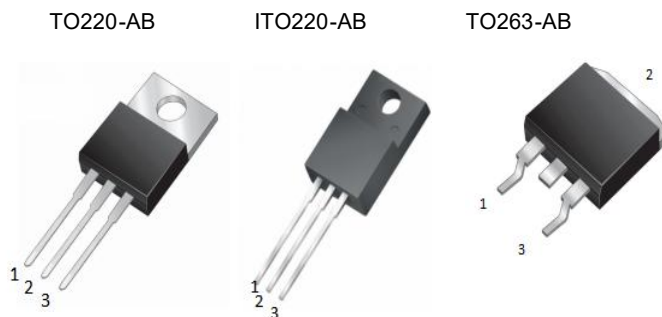
1. Features

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

2. Mechanical Data

- Case:Molded Plastic,TO220-AB, ITO220-AB,TO263-AB.
- Epoxy:UL 94V-0 rate flame retardant.
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026.
- Marking:marked on body.
- Mounting Position : Any.

Part No.	Package	Packing
SBP20L60CT	TO-220AB	50pcs / Tube
SBP20L60FCT	ITO-220AB	50pcs / Tube
SBP20L60CG	TO-263AB	50pcs / Tube
SBP20L60CG	TO-263AB	800pcs / Tube



3. Maximum Ratings and Electrical Characteristics

Electrical Characteristics Rating at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	60	V
Maximum RMS Voltage	V_{RMS}	42	V
Maximum DC Blocking Voltage	V_{DC}	60	V
Average Rectified Output Current	$I_{F(AV)}$	20.0	A
per device		10.0	
per diode			
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed @Tj=25°C on rated load (JEDEC Method)	I_{FSM}	150	A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	93.38	A ² s
Maximum Instantaneous Forward Voltage @IF=10A	V_{FM}	0.60	V
Maximum DC reverse current @Tj=25°C at rated DC blocking voltage @Tj=125°C	I_R	100.0	uA
		20(TYP)	mA
Typical Junction Capacitance	C_j	480	pF
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.0	°C/W
Operating Temperature Range	T_j	-55 to+150	°C
Storage Temperature Range	T_{STG}	-55 to+150	°C

Note:

1. Mounted on infinite heatsink.



4. Rating And Characteristic Curves

Fig. 1 Forward Current Derating Curve

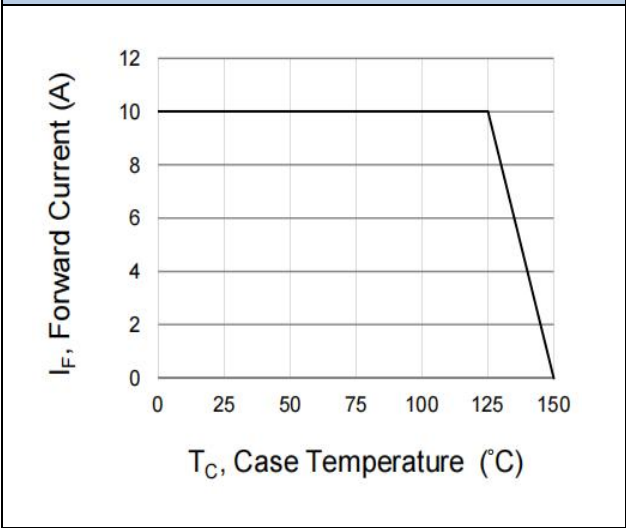


Fig. 2 Typical Junction Capacitance

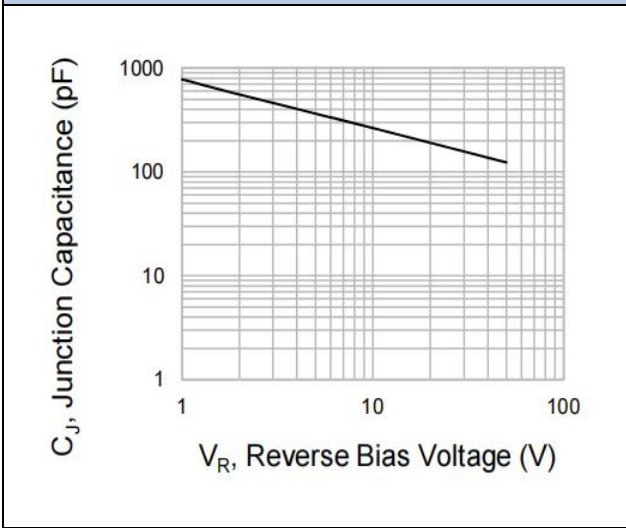


Fig. 3 Typical Reverse Characteristics

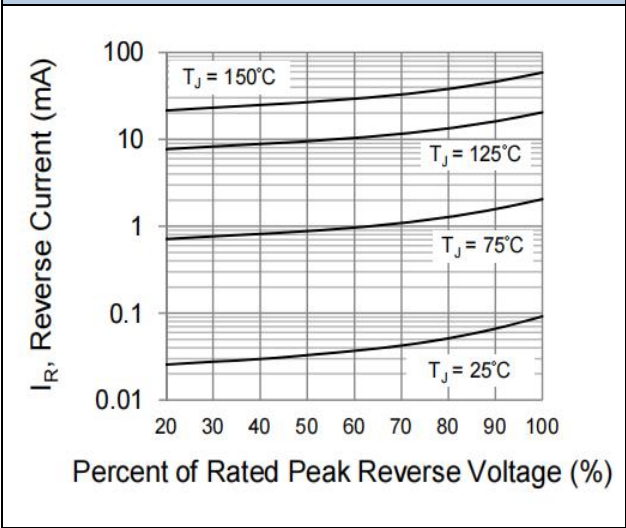
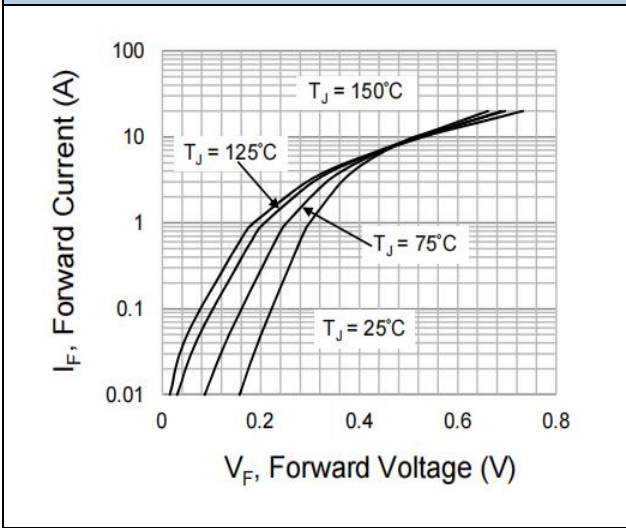


Fig.4 Typical Forward Characteristics



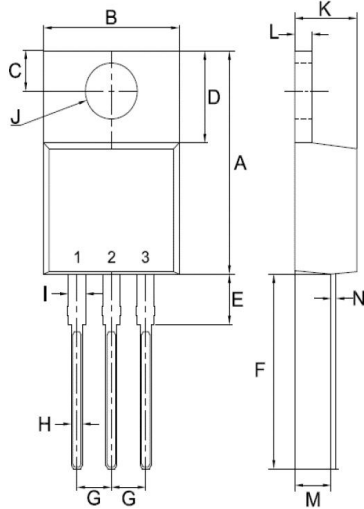


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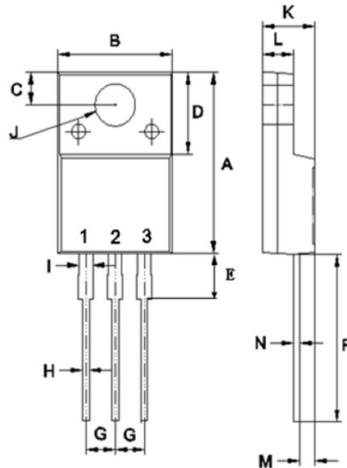
5. Dimensions

TO220-AB



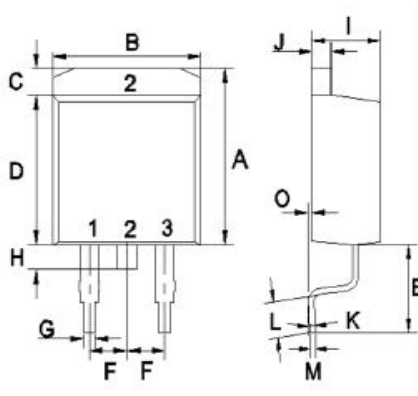
Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.583	0.622	14.80	15.80
B	0.377	0.413	9.57	10.50
C	0.100	0.116	2.54	2.94
D	0.228	0.268	5.80	6.80
E	0.116	0.156	2.95	3.95
F	0.500	0.528	12.70	13.40
G	0.092	0.108	2.34	2.74
H	0.020	0.044	0.51	1.11
I	0.038	0.062	0.97	1.57
J	0.139	0.163	3.54	4.14
K	0.168	0.192	4.27	4.87
L	0.042	0.058	1.07	1.47
M	0.080	0.115	2.03	2.92
N	0.012	0.025	0.30	0.64

ITO220-AB



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.571	0.610	14.50	15.50
B	0.374	0.413	9.50	10.50
C	0.098	0.114	2.50	2.90
D	0.248	0.287	6.30	7.30
E	0.130	0.169	3.30	4.30
F	0.512	0.551	13.00	14.00
G	0.093	0.108	2.35	2.75
H	0.012	0.035	0.30	0.90
I	0.035	0.059	0.90	1.50
J	0.126	0.150	3.20	3.80
K	0.167	0.191	4.24	4.84
L	0.099	0.115	2.52	2.92
M	0.043	0.059	1.09	1.49
N	0.019	0.025	0.47	0.63

TO263-AB



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.411	0.427	10.44	10.84
B	0.386	0.402	9.81	10.21
C	0.057	0.072	1.44	1.84
D	0.346	0.362	8.80	9.20
E	0.176	0.183	4.46	4.66
F	0.096	0.104	2.44	2.64
G	0.024	0.040	0.61	1.01
H	0.028	0.051	0.70	1.30
I	0.168	0.192	4.27	4.87
J	0.042	0.058	1.07	1.47
K			0°	8°
L	0.083	0.098	2.10	2.50
M	0.012	0.018	0.30	0.46
O	0.000	0.010	0.00	0.25

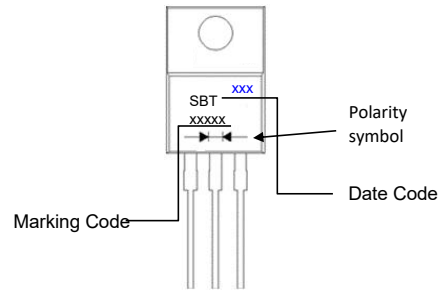
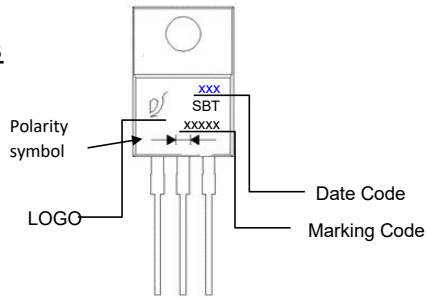


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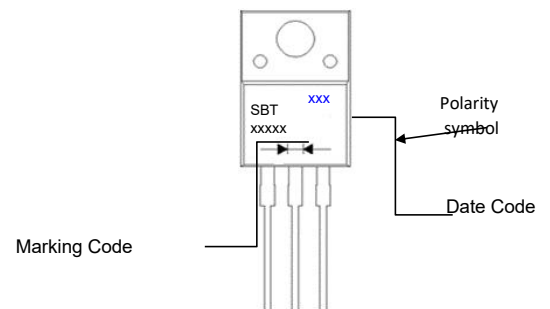
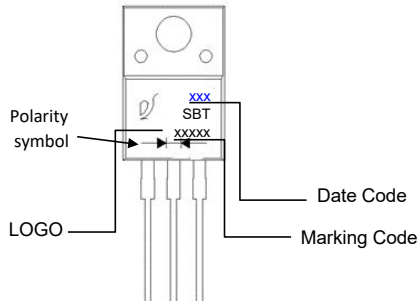
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6. Part Marking System

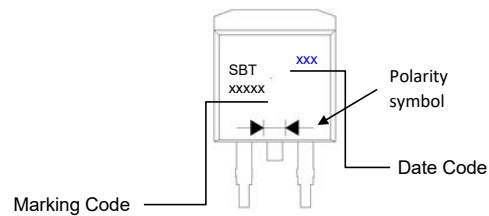
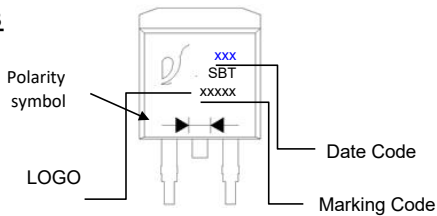
TO220-AB



ITO220-AB



TO263-AB



7. Package Information

Package	Packing Type	Tube Size	Quantity(pcs)
		mm	
TO220AB	Tube	530*32*7	50
ITO220AB	Tube	530*32*7	50
TO263	Tube	530*32*7	50

Package	Tape Width (mm)	Reel Size		Quantity(pcs)
		mm	inch	
TO263	24	330	13	800



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