



Micro Commercial Components
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Features

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SB1020CT	SB1020CT	20V		20V
SB1030CT	SB1030CT	30V		30V
SB1040CT	SB1040CT	40V		40V
SB1050CT	SB1050CT	50V		50V
SB1060CT	SB1060CT	60V		60V
SB1080CT	SB1080CT	80V		80V
SB10100CT	SB10100CT	100V		100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

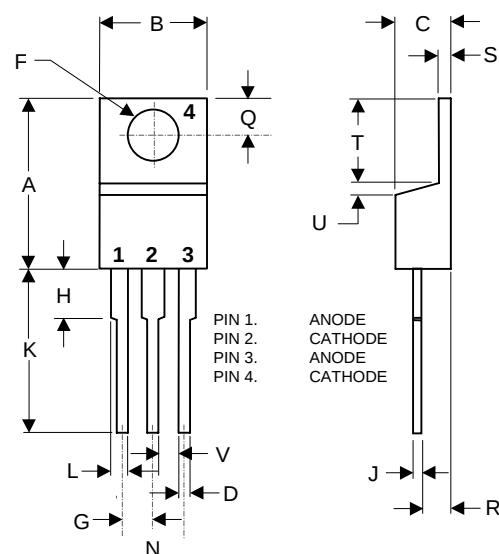
Average Forward Current	$I_{F(AV)}$	10A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element SB1020CT-1040CT SB1050CT-1060CT SB1080CT-10100CT	V_F	.55V .75V .85V	$I_{FM} = 10 \text{ A mper}$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage MBR1020-1045 MBR1060-10100	I_R	0.5mA 50mA	$T_J = 25^\circ\text{C}$

*Pulse test: Pulse width 300 μsec , Duty cycle 1%

SB1020CT THRU SB10100CT

10 Amp Schottky Barrier Rectifier 20 to 100 Volts

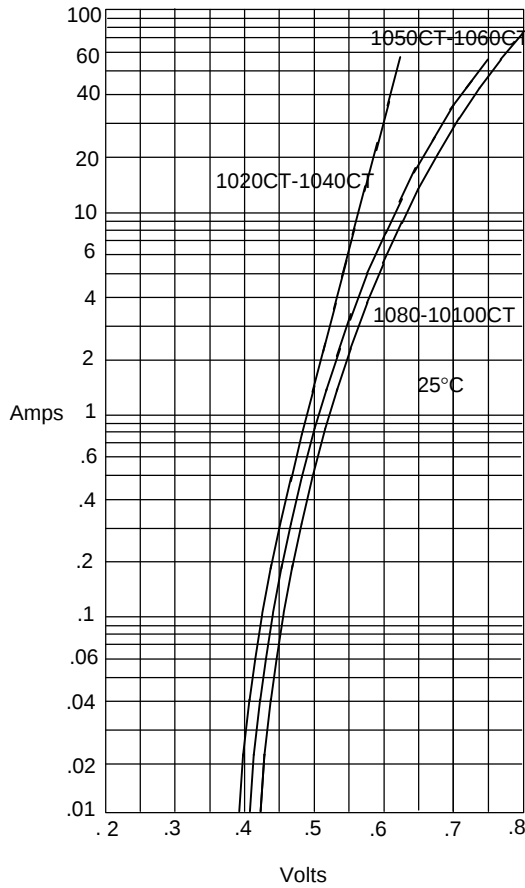
TO-220AB



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.595	.620	15.11	15.75	
B	.380	.405	9.65	10.29	
C	.160	.190	4.06	4.82	
D	.025	.035	0.64	0.89	
E	.142	.147	3.61	3.73	
F	.190	.210	4.83	5.33	
G	.110	.130	2.79	3.30	
H	.018	.025	0.46	0.64	
I	.500	.562	12.70	14.27	
J	.045	.060	1.14	1.52	
K	.100	.120	2.54	3.04	
L	.080	.110	2.04	2.79	
M	.045	.055	1.14	1.39	
N	.235	.255	5.97	6.48	
O	-----	.050	-----	1.27	

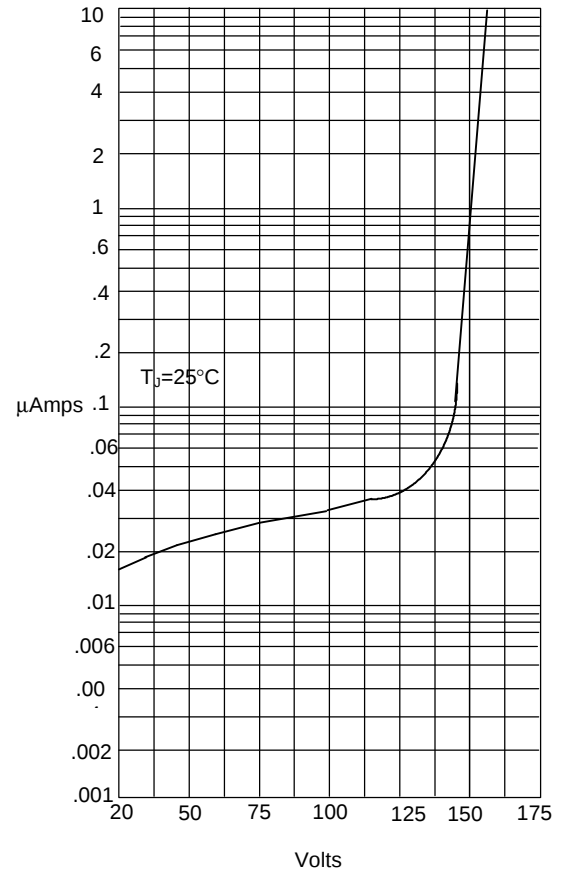
SB1020CT thru SB10100CT

Figure 1
Typical Forward Characteristics



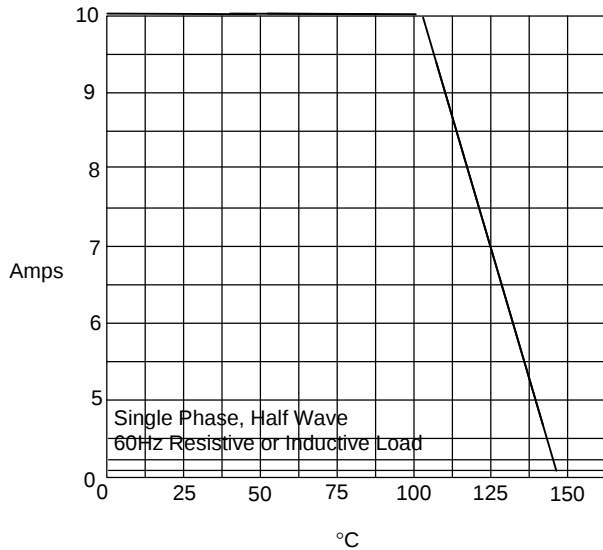
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



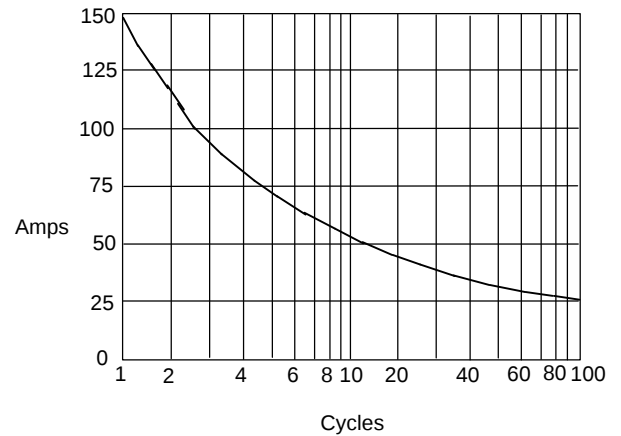
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles