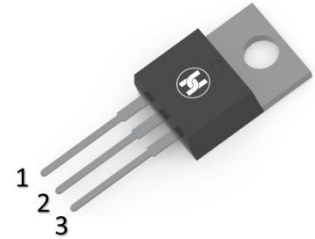
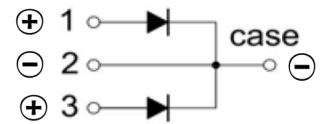


**SCHOTTKY BARRIER DIODE**
**FEATURES**

- Low power loss, high efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- Guard Ring for over voltage protection
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications


**TO-220**
**MECHANICAL DATA**

- Case: TO-220
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 2.30 grams (approximate)
- Marking: MBR20100CT


**MAXIMUM RATINGS (T<sub>A</sub> = 25°C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	100	V
DC Reverse Voltage	V <sub>R</sub>	100	V
RMS Reverse Voltage	V <sub>RMS</sub>	70	V
Non-Repetitive Peak Forward Surge Current @ t = 8.3 ms	I <sub>FSM</sub>	120	A
Mean rectifying current	I <sub>F</sub>	20	A
Power dissipation	P <sub>D</sub>	2	W
Thermal Resistance From Junction To Ambient	R <sub>θJA</sub>	50	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~+150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise specified)**

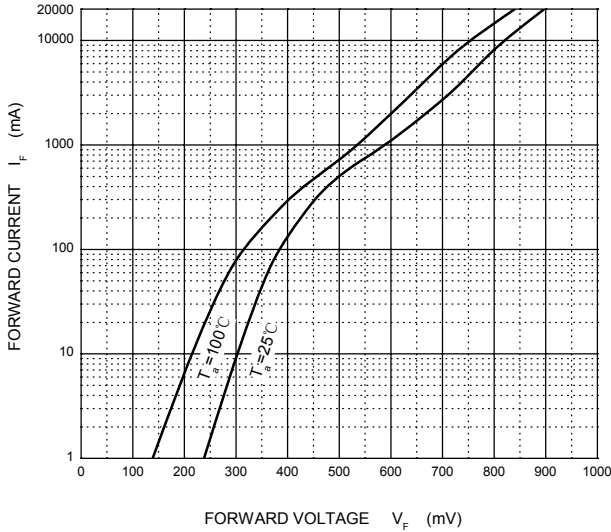
Parameter	Symbol	Min	Max	Unit	Conditions
Forward voltage	V <sub>F</sub>		1	V	I <sub>F</sub> =10A
			1.2	V	I <sub>F</sub> =20A*
Reverse current	I <sub>R</sub>		0.10	mA	V <sub>R</sub> =100V
Reverse voltage	V <sub>R</sub>	100		V	I <sub>R</sub> =1mA
Junction capacitance	C <sub>J</sub>		150	pF	V <sub>R</sub> =4V, f=1MH

\*Pulse test

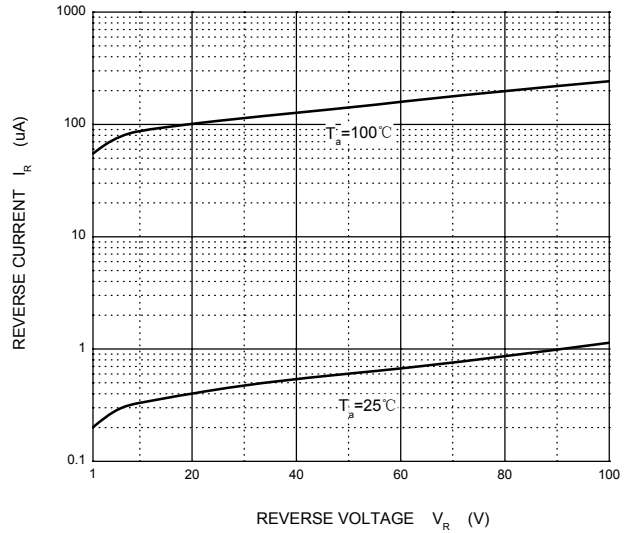
SCHOTTKY BARRIER DIODE

Typical Characteristics

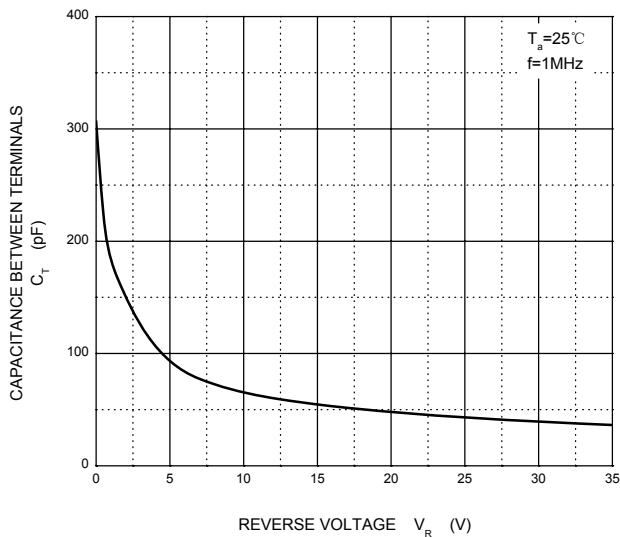
Forward Characteristics



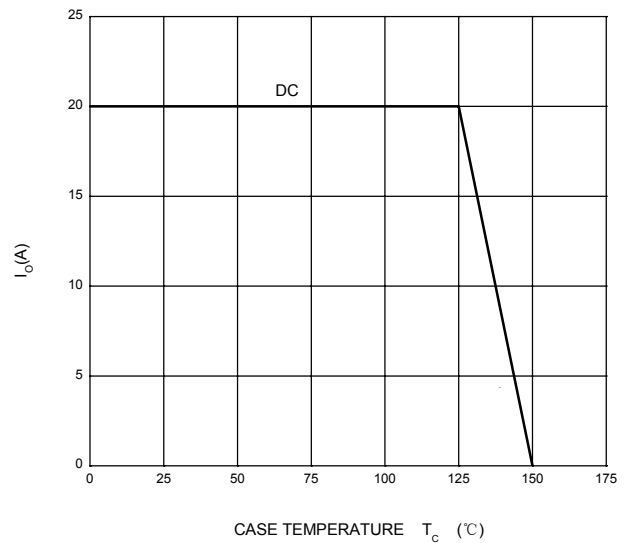
Reverse Characteristics

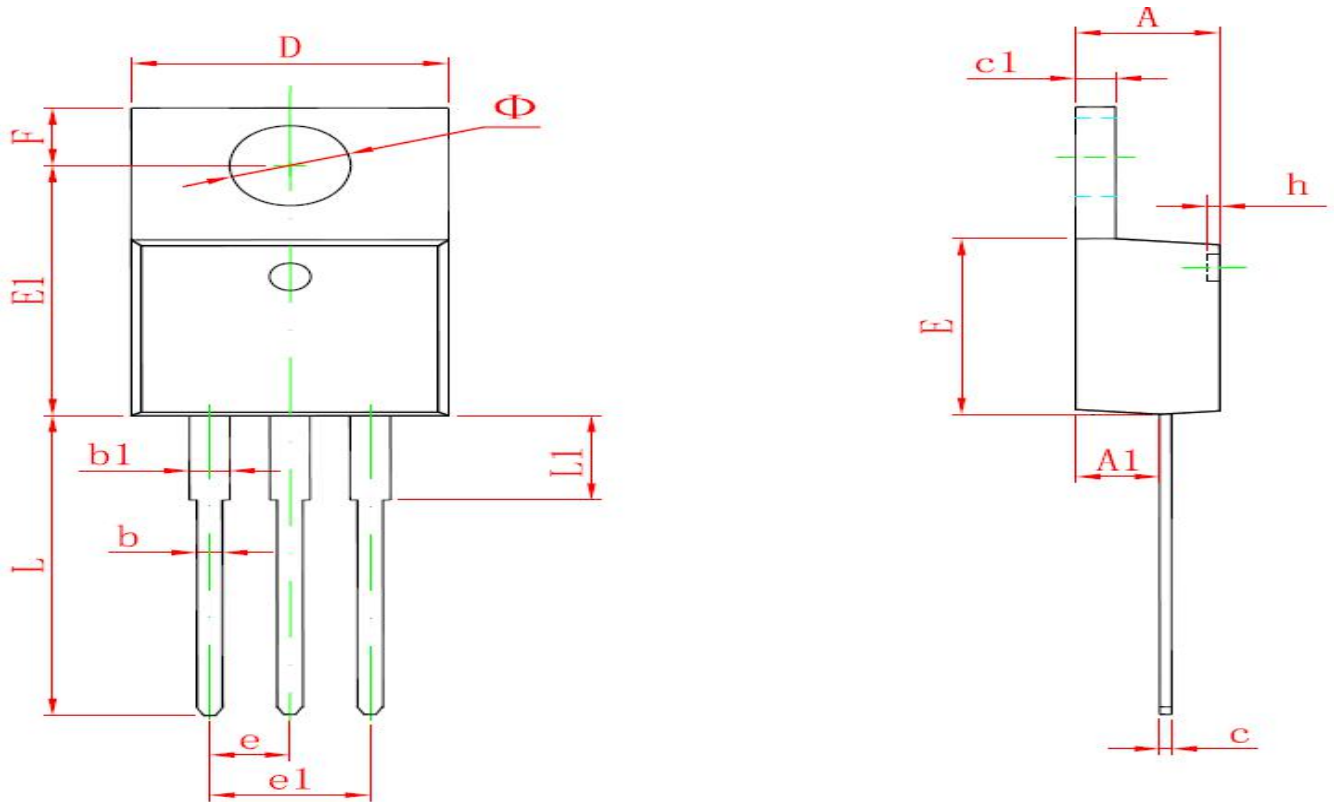


Capacitance Characteristics



$I_O$  vs  $T_C$



**SCHOTTKY BARRIER DIODE**
**TO-220 Package Outline Dimensions**


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.470	4.670	0.176	0.184
A1	2.520	2.820	0.099	0.111
b	0.710	0.910	0.028	0.036
b1	1.170	1.370	0.046	0.054
c	0.310	0.530	0.012	0.021
c1	1.170	1.370	0.046	0.054
D	10.010	10.310	0.394	0.406
E	8.500	8.900	0.335	0.350
E1	12.060	12.460	0.475	0.491
e	2.540Typ		0.100Typ	
e1	4.980	5.180	0.196	0.204
F	2.590	2.890	0.102	0.114
h	0.000	0.300	0.000	0.012
L	13.400	13.800	0.528	0.543
L1	3.560	3.960	0.140	0.156
Ø	3.735	3.935	0.147	0.155