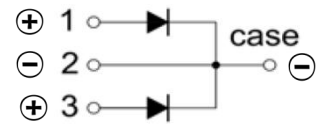


**SCHOTTKY BARRIER DIODE**
**FEATURES**

- 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-220F**
**MECHANICAL DATA**

- Case: TO-220F
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Weight: 2.00 grams (approximate)


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

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	150	V
DC Reverse Voltage	V <sub>R</sub>	150	V
RMS Reverse Voltage	V <sub>RMS</sub>	105	V
Non-Repetitive Peak Forward Surge Current @ t = 8.3 ms	I <sub>FSM</sub>	150	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>	125	°C
Storage Temperature	T <sub>STG</sub>	-55 ~+150	°C

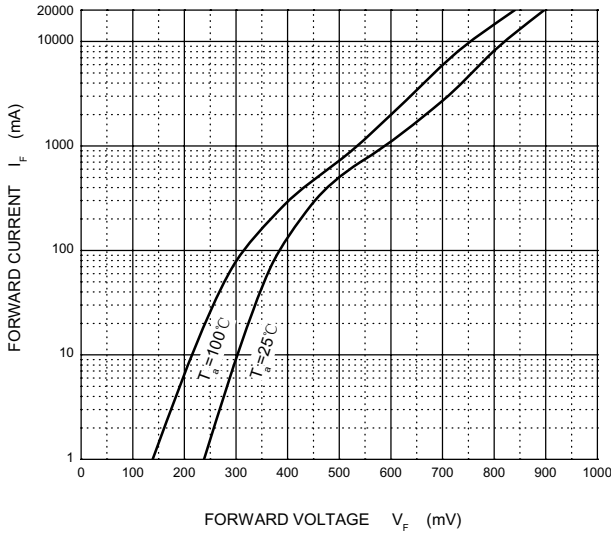
**ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise specified)**

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 (PLUST TEST)
Reverse current	I <sub>R</sub>		100	μA	V <sub>R</sub> =150V
Reverse voltage	V <sub>R</sub>	150		V	I <sub>R</sub> =1mA

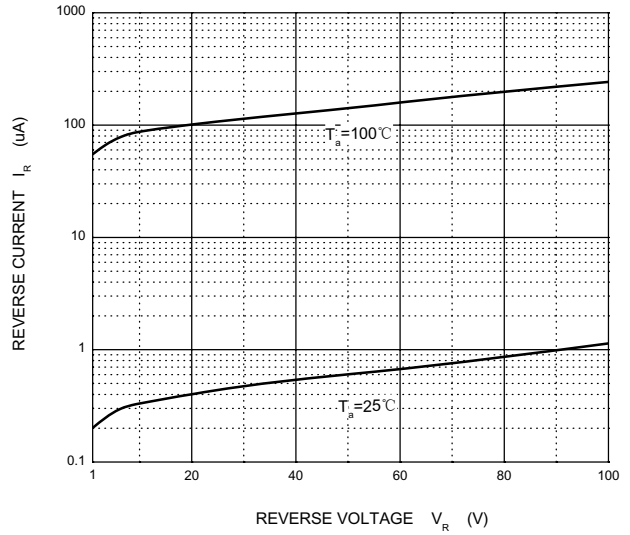
SCHOTTKY BARRIER DIODE

**Typical Characteristics**

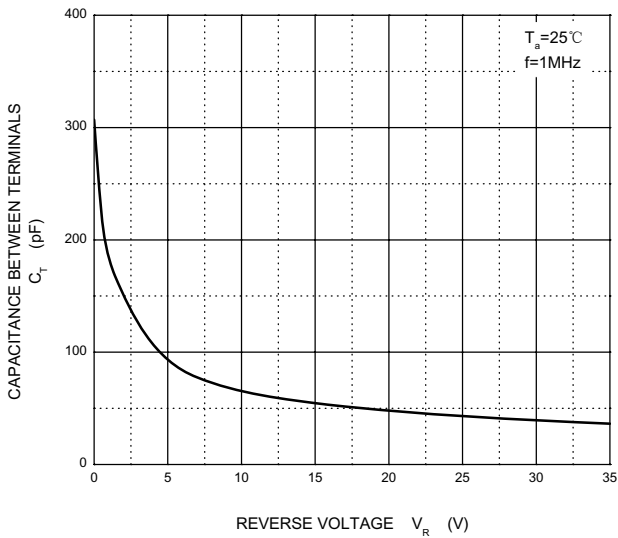
**Forward Characteristics**



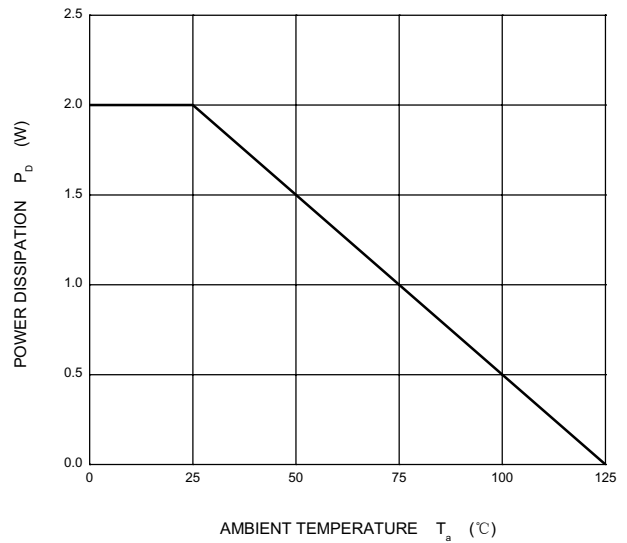
**Reverse Characteristics**

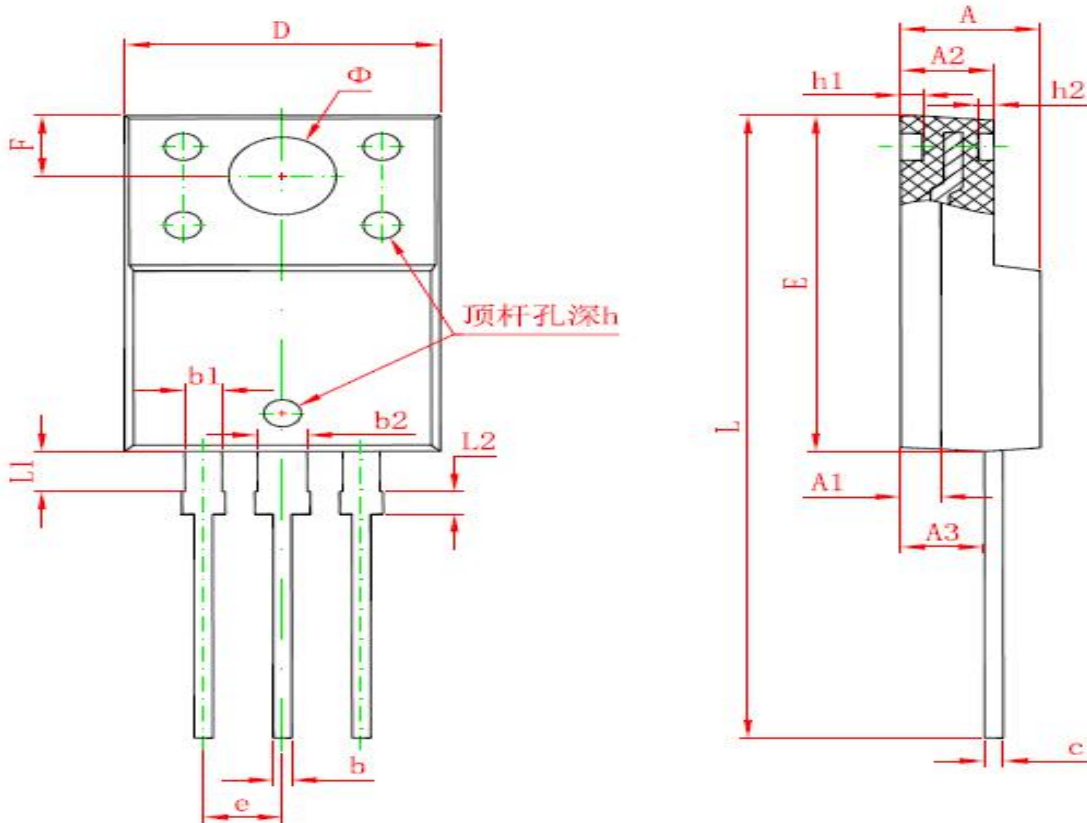


**Capacitance Characteristics**



**Power Derating Curve**



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


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.300	4.700	0.169	0.185
A1	1.300REF		0.051REF	
A2	2.800	3.200	0.110	0.126
A3	2.500	2.900	0.098	0.114
b	0.500	0.750	0.012	0.021
b1	1.100	1.350	0.020	0.030
b2	1.500	1.750	0.043	0.053
c	0.500	0.750	0.020	0.030
D	9.960	10.360	0.392	0.408
E	14.800	15.200	0.583	0.598
e	2.540TYP		0.100TYP	
F	2.700REF		0.106REF	
$\Phi$	3.500REF		0.138REF	
h	0.000	0.300	0.000	0.012
h1	0.800REF		0.031REF	
h2	0.500REF		0.020REF	
L	28.000	28.400	1.102	1.118
L1	1.700	1.900	0.067	0.075
L2	0.900	1.100	0.035	0.043