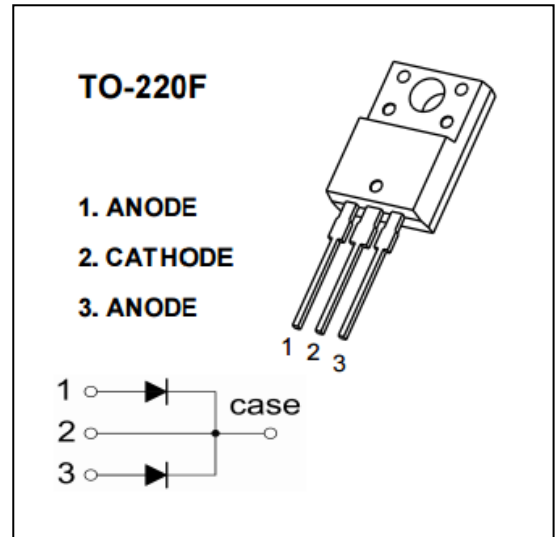




## MBR10L100FCT

### Feature

- Low Power Loss, High Efficiency
- Low Reverse Current
- High Surge Capability
- High Current Capability and Low Forward Voltage



### ABSOLUTE MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

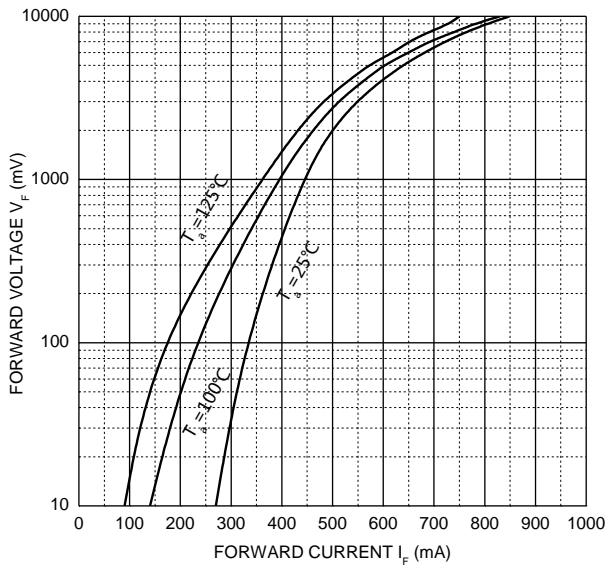
Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	$V_{RRM}$	100	V
Working peak reverse voltage	$V_{RWM}$		
DC blocking voltage	$V_R$		
RMS reverse voltage	$V_{R(RMS)}$	70	V
Average rectified output current@ $T_c=100^{\circ}\text{C}$	$I_o$	10	A
Non-Repetitive peak forward surge current 8.3ms half sine wave	IFSM	120	A
Power dissipation	$P_D$	2.5	W
Thermal resistance from junction to ambient	$R_{\theta JA}$	50	$^{\circ}\text{C}/\text{W}$
Junction temperature	$T_j$	150	$^{\circ}\text{C}$
Storage temperature	$T_{stg}$	-55~+150	$^{\circ}\text{C}$

### ELECTRICAL CHARACTERISTICS( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

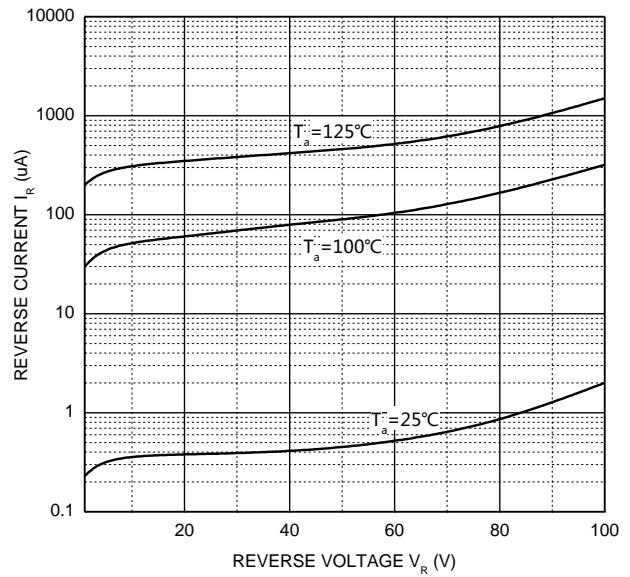
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R = 250\mu\text{A}$	100	125		V
Reverse current	$I_R$	$V_R = 100\text{V}$		3	20	$\mu\text{A}$
Forward voltage	$V_F$	$I_F = 5\text{A}$		0.64	0.68	V
	$V_F$	$I_F = 10\text{A}$		0.84	0.90	V
Typical total capacitance	$C_{tot}$	$V_R = 4\text{V}, f = 1\text{MHz}$		450		pF

**Typical Characteristics**

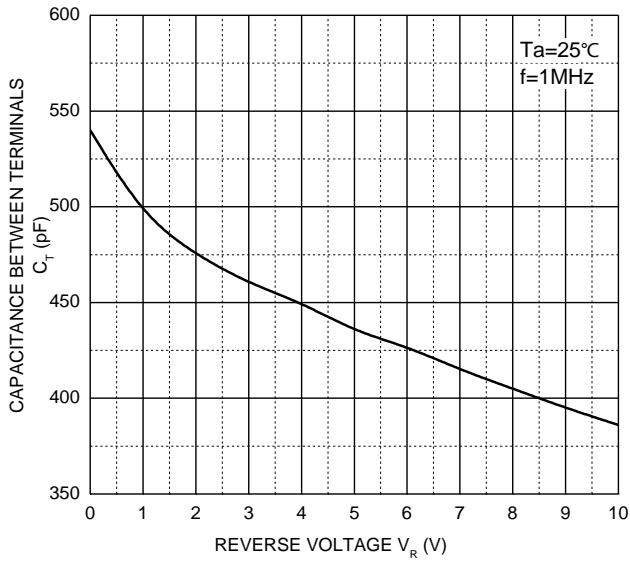
**Forward Characteristics**



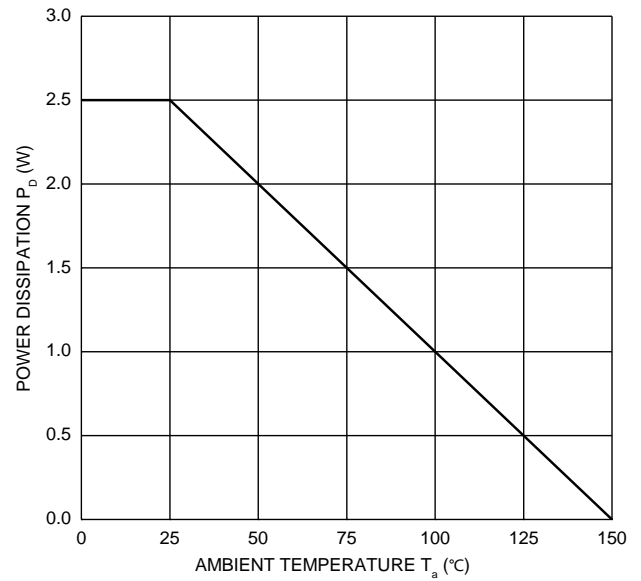
**Reverse Characteristics**



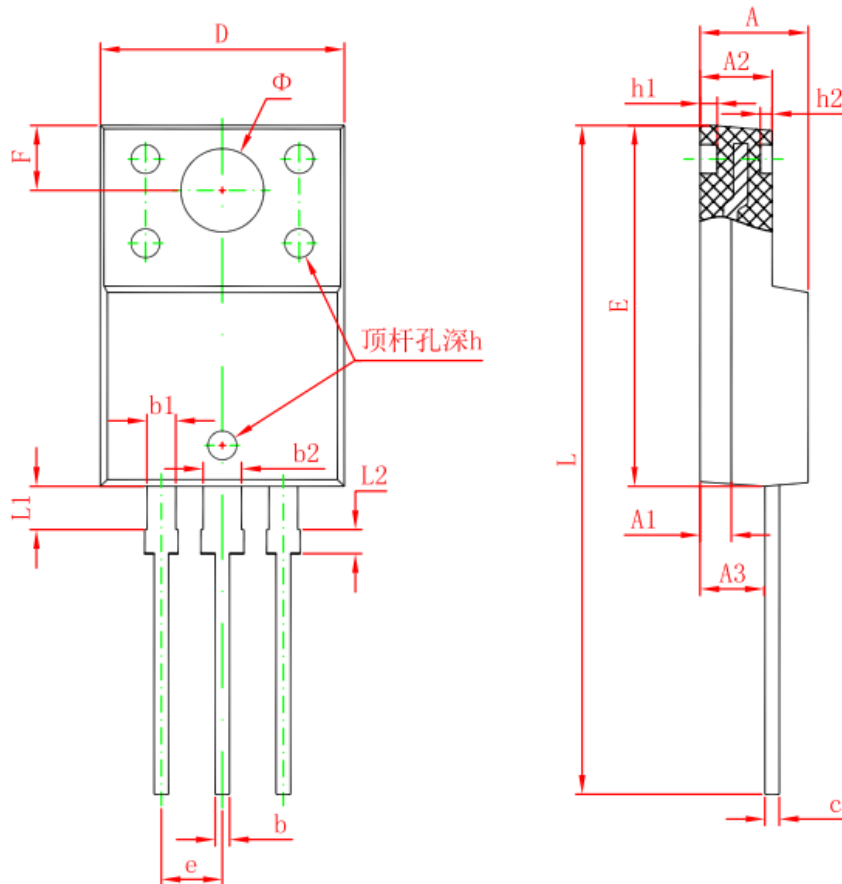
**Capacitance Characteristics**



**Power Derating Curve**



## 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	1.300 REF.		0.051 REF.	
A2	2.800	3.200	0.110	0.126
A3	2.500	2.900	0.098	0.114
b	0.500	0.750	0.020	0.030
b1	1.100	1.350	0.043	0.053
b2	1.500	1.750	0.059	0.069
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	2.540 TYP.		0.100 TYP.	
F	2.700 REF.		0.106 REF.	
$\Phi$	3.500 REF.		0.138 REF.	
h	0.000	0.300	0.000	0.012
h1	0.800 REF.		0.031 REF.	
h2	0.500 REF.		0.020 REF.	
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

单击下面可查看定价，库存，交付和生命周期等信息

[>>GP\(格瑞宝\)](#)