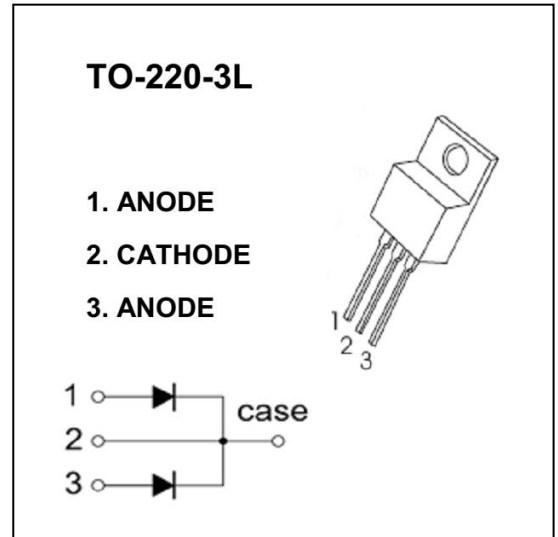




## MBR40U60CT

### Feature

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



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

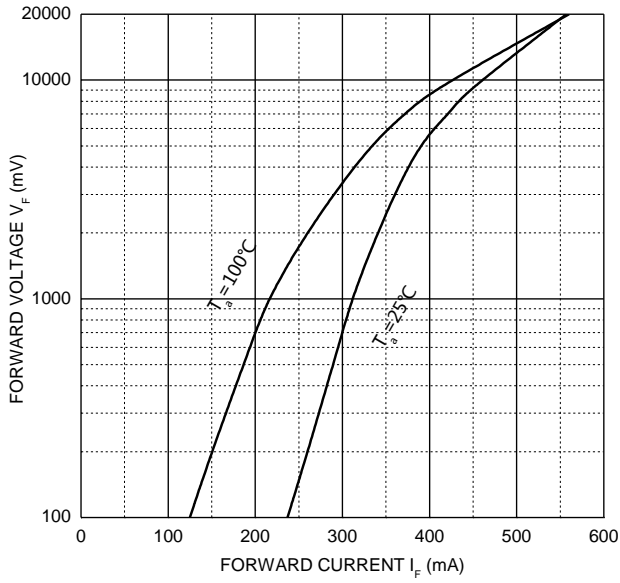
Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	$V_{RRM}$	60	V
Working peak reverse voltage	$V_{RWM}$		
DC blocking voltage	$V_R$		
RMS reverse voltage	$V_{R(RMS)}$	42	V
Average rectified output current@ $T_c=100^\circ\text{C}$	$I_o$	40	A
Non-Repetitive peak forward surge current 8.3ms half sine wave	$I_{FSM}$	300	A
Power dissipation	$P_D$	2	W
Thermal resistance from junction to ambient	$R_{\theta JA}$	50	$^\circ\text{C/W}$
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55~+125	$^\circ\text{C}$

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

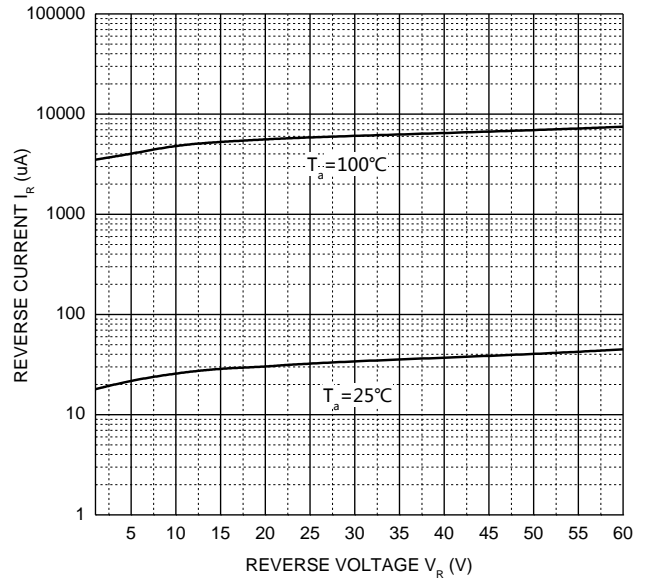
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R = 250\mu\text{A}$	60	70		V
Reverse current	$I_R$	$V_R = 60\text{V}$		50	200	$\mu\text{A}$
Forward voltage	$V_F$	$I_F = 5\text{A}$		0.37	0.42	V
	$V_F$	$I_F = 10\text{A}$		0.45	0.50	V
	$V_F$	$I_F = 20\text{A}$		0.55	0.62	V
Typical total capacitance	$C_{tot}$	$V_R = 4\text{V}, f = 1\text{MHz}$		1500		pF

**Typical Characteristics**

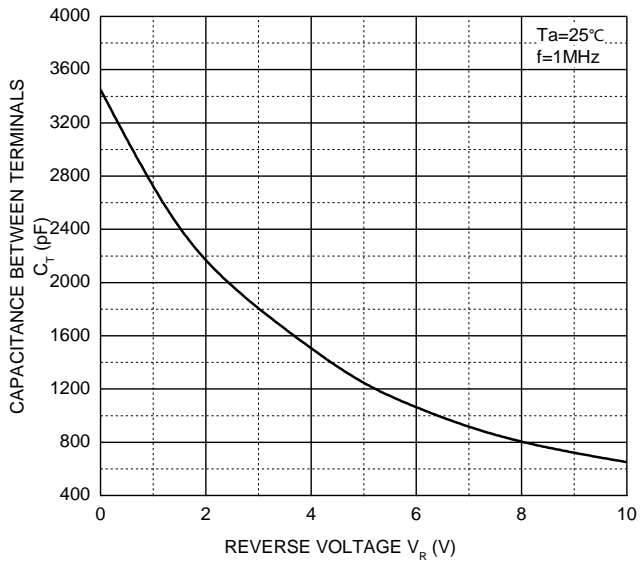
**Forward Characteristics**



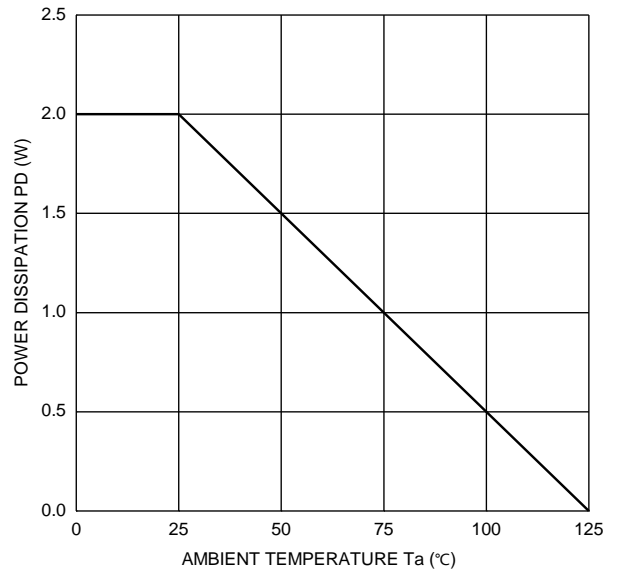
**Reverse Characteristics**



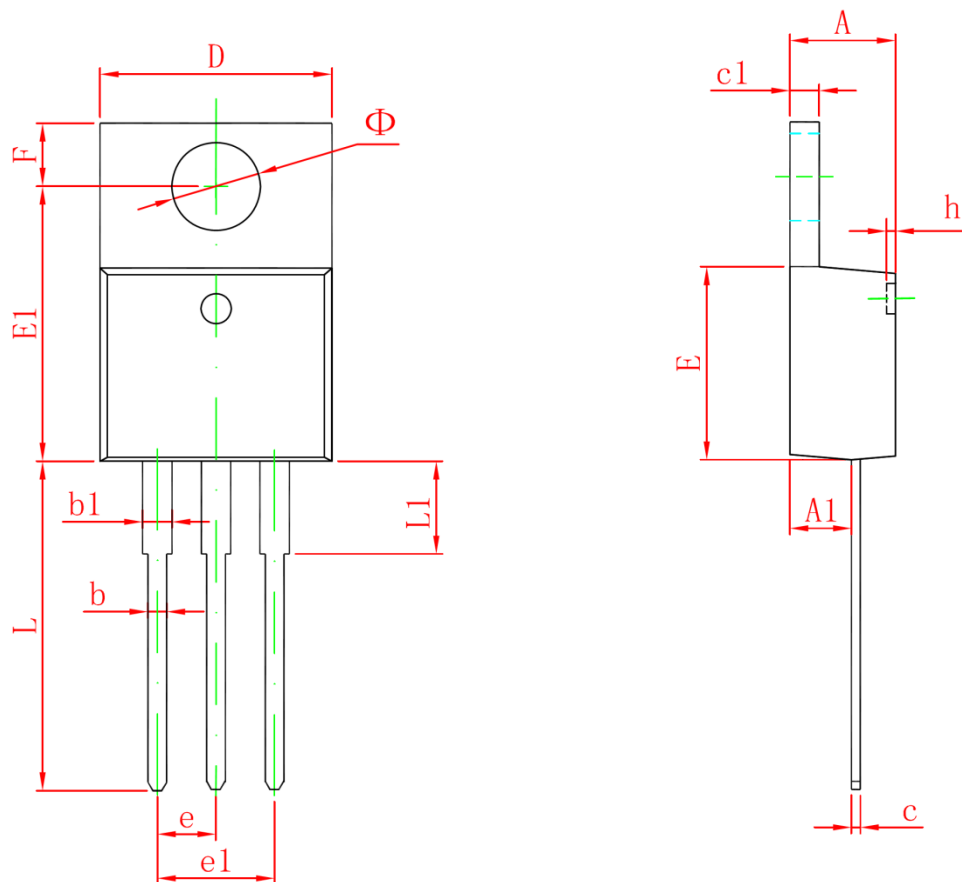
**Capacitance Characteristics**



**Power Derating Curve**



## TO-220-3L 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	2.540 TYP		0.100 TYP	
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
$\Phi$	3.735	3.935	0.147	0.155

单击下面可查看定价，库存，交付和生命周期等信息

[>>GP\(格瑞宝\)](#)