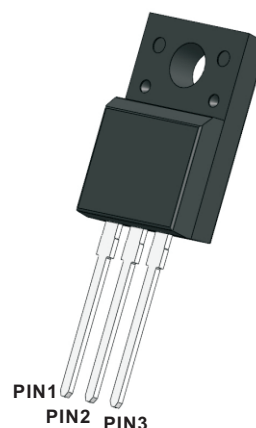




**Extrtreme Low VF Schottky Barrier Rectifiers**  
**Reverse Voltage - 100 Volts**  
**Forward Current - 60 Amperes**

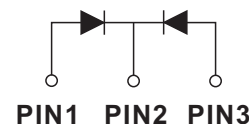
**TO-220F-3L**



**RoHS**  
COMPLIANT

**Features**

- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High temperature soldering guaranteed
- Mounting position: any



**Mechanical data**

- Case: TO-220F-3L
- Approx Weight: 1.767g ( 0.062oz)
- Case Material: “Green” molding compound, UL flammability classification 94V-0, “Halogen-free”.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS  
Ratings at 25°C ambient temperature unless otherwise specified

CHARACTERISTICS	Symbol	MBR60100FT	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS voltage	$V_{RMS}$	70	V
Maximum DC Blocking Voltage	$V_{DC}$	100	V
Maximum Average Forward Rectified Current Per diode Per device	$I_{F(AV)}$	30 60	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) per diode	$I_{FSM}$	300	A
Instantaneous forward voltage at 30 A	$V_F$	0.84	V
Maximum DC Reverse Current at Rated DC Reverse Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	$I_R$	0.05 20	mA
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	420	pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JC}$ $R_{\theta JA}$	4 50	$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_j$	-55 ~ +150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ +150	$^\circ\text{C}$

Note:

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 10cmX10cmX1mm copper pad areas.



Fig.1 TYPICAL FORWARD CURRENT DERATING CURVE

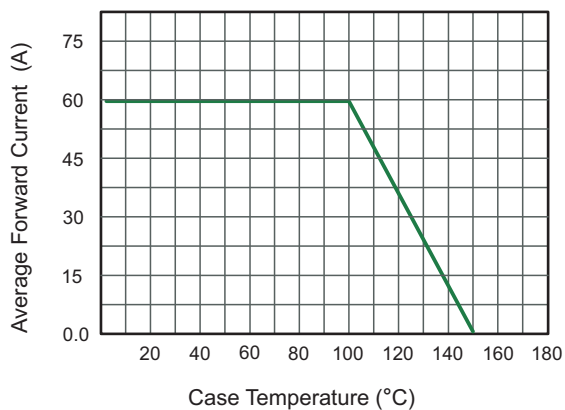


Fig.2 Typical Reverse Characteristics

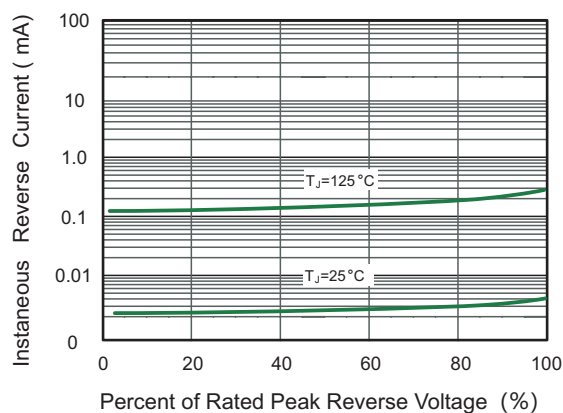


Fig.3 Typical Forward Characteristic(per leg)

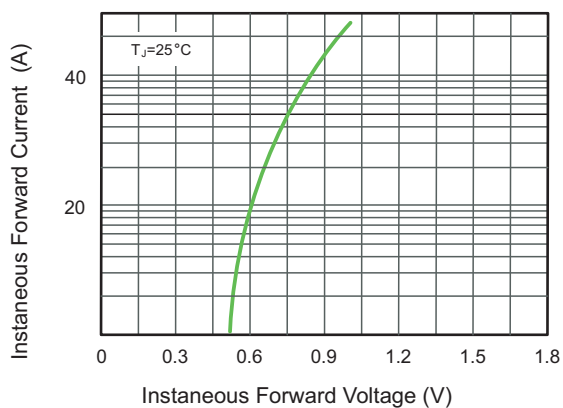


Fig.4 Typical Junction Capacitance

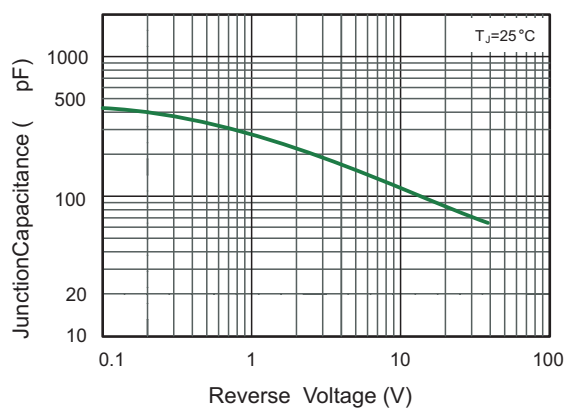


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

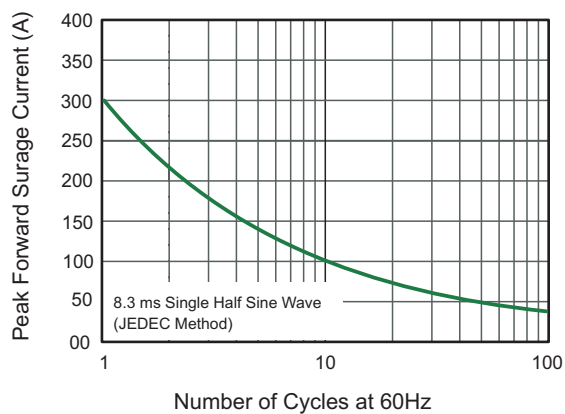
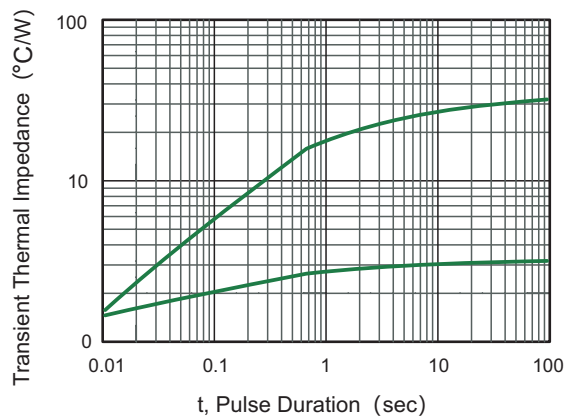


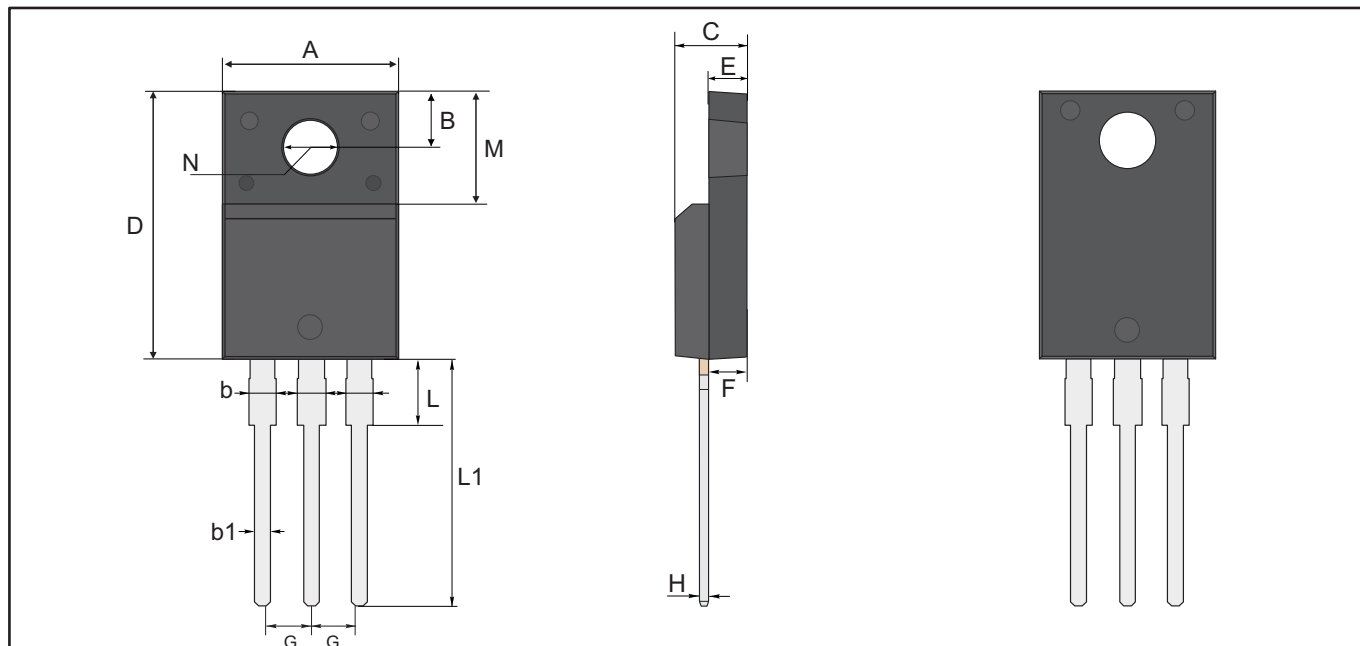
Fig.6 Typical Transient Thermal Impedance





Package Outline  
Through Hole Package ; 3 leads

TO-220F-3L



TO-220F-3L Mechanical data

UNIT		A	B	b	b1	C	D	E	F	G	H	L	L1	M	N
mm	max	10.28	3.37	1.44	0.9	4.9	16.07	2.74	2.74	2.64	0.6	2.85	13.7	6.98	3.18 typ.
	typ	10.18	3.27	1.34	0.8	4.7	15.87	2.54	2.54	2.54	0.5	2.65	13.5	6.68	
	min	10.08	3.17	1.24	0.7	4.5	15.67	2.34	2.34	2.44	0.4	2.45	13.3	6.38	
mil	max	405	133	57	35	193	633	108	108	104	24	112	539	275	125 typ.
	typ	401	129	53	31	185	625	100	100	100	20	104	531	263	
	min	397	125	49	28	177	617	92	92	96	16	96	524	251	

Marking

Type number	Marking code
MBR60100FT	MBR60100FT



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