



Low VF Schottky Barrier Rectifiers

Reverse Voltage - 150 V

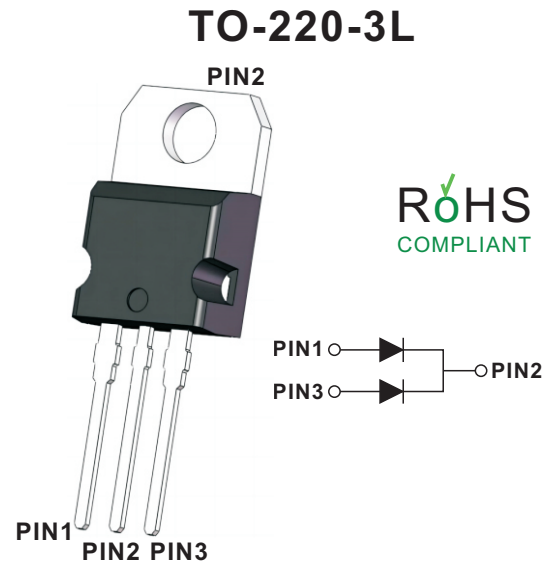
Forward Current - 20 A

Features

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

Mechanical data

- Case: TO-220-3L
- Approx. Weight: 2.04g (0.07oz)
- RoHS compliant
- 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

Parameter		MBRT20150CD	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	150	V
Maximum RMS voltage	V_{RMS}	105	V
Maximum DC Blocking Voltage	V_{DC}	150	V
Average Rectified Forward Current Per leg Per device	I_O	10 20	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)(Per leg)	I_{FSM}	150	A
Max Instantaneous Forward Voltage at 10 A(per leg)	V_F	0.85	V
Maximum DC Reverse Current at Rated DC Reverse Voltage $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	I_R	0.1 30	mA
Typical Junction Capacitance($f=1MHz, V_R=4V$)	C_j	300	pF
Typical Thermal Resistance (P.C.B. mounted with copper pad areas)	R_{thJA}	45	$^{\circ}C/W$
Operating Junction Temperature Range	T_j	-55 ~ +150	$^{\circ}C$
Storage Temperature Range	T_{stg}	-55 ~ +150	$^{\circ}C$



Fig.1 Typical Forward Current Derating Curve

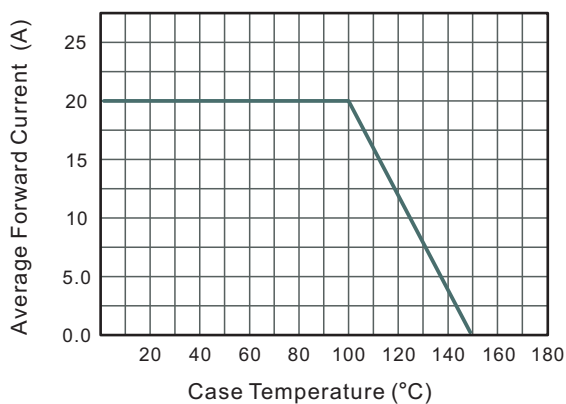


Fig.2 Typical Reverse Characteristics

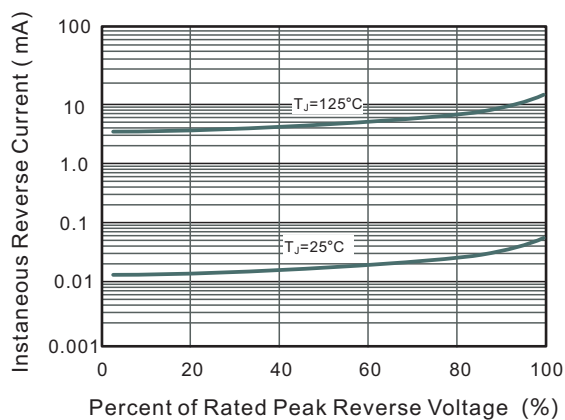


Fig.3 Typical Forward Characteristic(per leg)

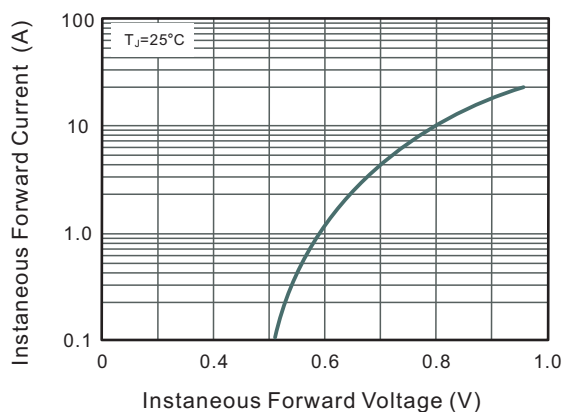


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

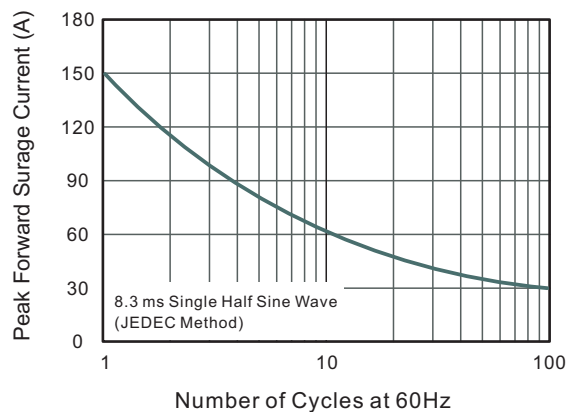
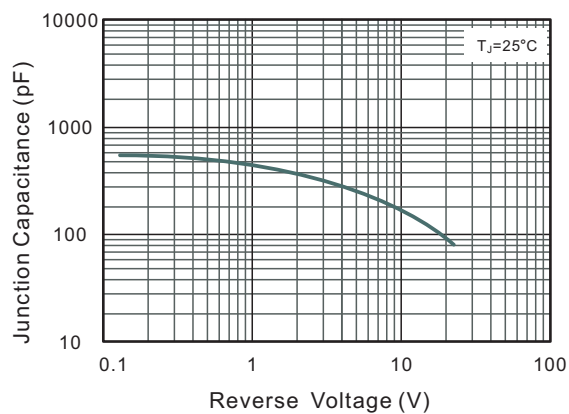


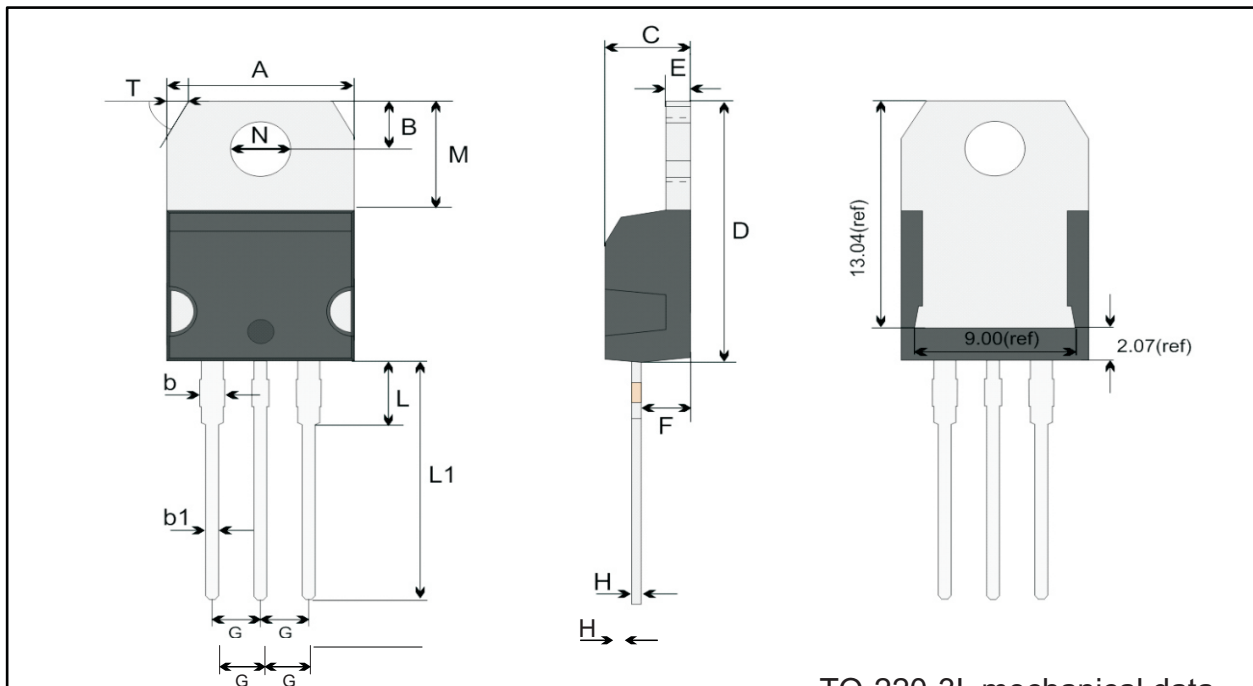
Fig.5 Typical Junction Capacitance





Package Outline
Through Hole Package ; 3 leads

TO-220-3L



TO-220-3L mechanical data

UNIT		A	B	b	b1	C	D	E	F	G	H	L	L1	M	N	T
mm	max	10.28	2.84	1.67	0.9	4.65	15.54	1.37	2.79	2.64	0.6	3.88	13.13	6.39	3.82 typ.	1.19 58° ref.
	typ	10.18	2.74	1.47	0.8	4.45	15.34	1.27	2.59	2.54	0.5	3.68	12.93	6.19		
	min	10.08	2.64	1.27	0.7	4.25	15.14	1.17	2.39	2.44	0.4	3.48	12.73	5.99		
mil	max	405	112	66	35	183	612	54	110	104	24	153	517	252	150 typ.	47 58° ref.
	typ	401	108	58	31	175	604	50	102	100	20	145	509	244		
	min	397	104	50	28	167	596	46	94	96	16	137	501	236		

Marking

Type number	Marking code
MBRT20150CD	MBRT20150CD



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