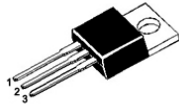
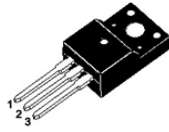


MBR20150CT/FCT/DC/CS

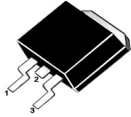
SCHOTTKY BARRIER RECTIFIER



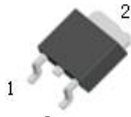
TO-220AB/CT



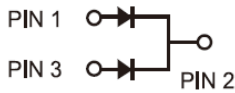
TO-220F/FCT



TO-263/DC



TO-252/CS



FEATURES

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection



APPLICATIONS

Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters

Primary Characteristic

I_O	2*10A
V_{RRM}	150V
I_{FSM}	290A
V_F	0.72V
T_{Jmax}	150°C
Assembly code	AD

MECHANICAL DATA

- **Case:** Molded plastic
- **Polarity:** As marked
- **Mounting Position:** Any
- **Molded Plastic:** UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Solder bath temperature 275°C maximum,10s per JESD 22-B106

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	150	V
Working Peak Reverse Voltage	V_{RWM}	150	V
Maximum DC Blocking Voltage	V_{DC}	150	V
Maximum Average Forward Rectified Current	Per Leg	10	A
	Total	20	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave	I_{FSM}	290	A
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-40 to +150	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	2	°C/W
TO-220AB,TO-263,TO-252			
TO-220F			

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics	Symbol	Value		Unit
Forward Voltage Drop(Note2)		Typ.	Max.	V
		0.73	-	
at $I_F=3A$		0.60	-	
		0.77	-	
at $I_F=5A$		0.64	-	
		0.84	0.90	
at $I_F=10A$		0.72	-	
		1	10	μA
Maximum Reverse Current at $V_R=150V$	I_R	1	-	mA

Note2:Pulse test: 300 μs pulse width, 1 % duty cycle

MBR20150CT/FCT/DC/CS

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

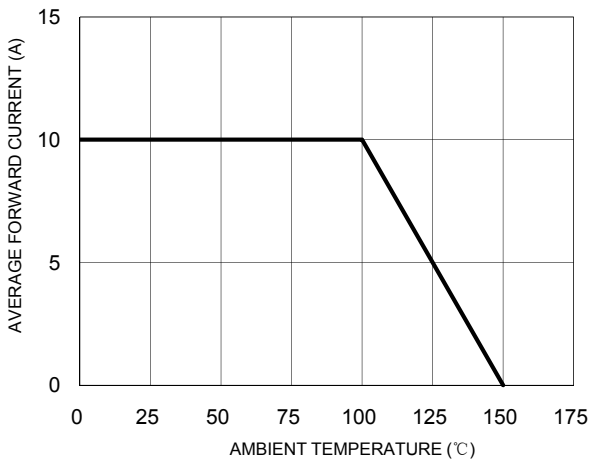


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

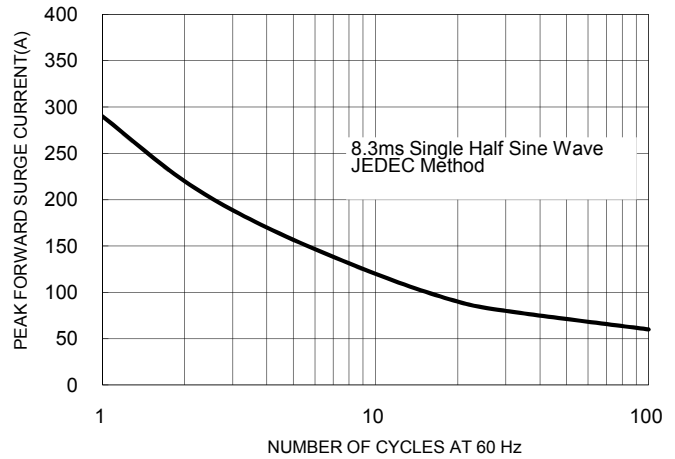


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

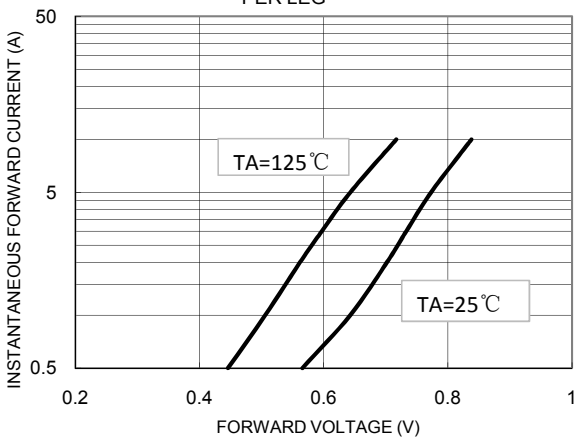
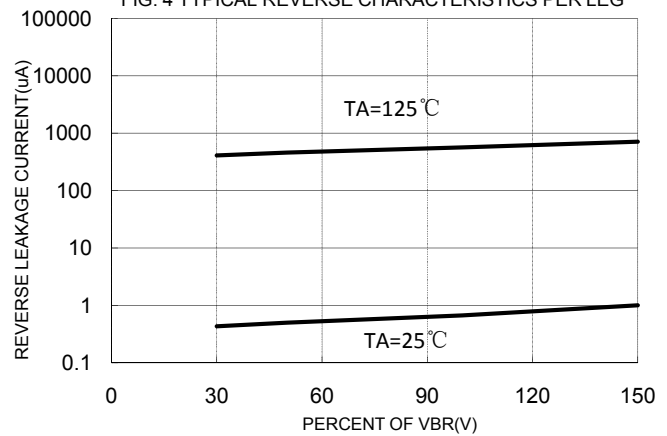
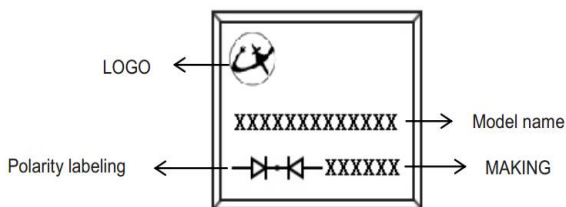


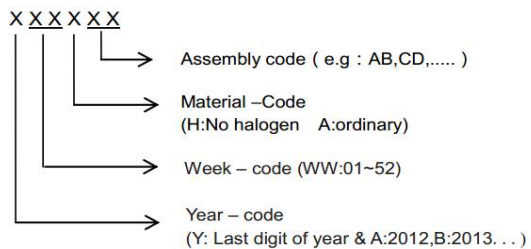
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



MAKING:



Ordering information

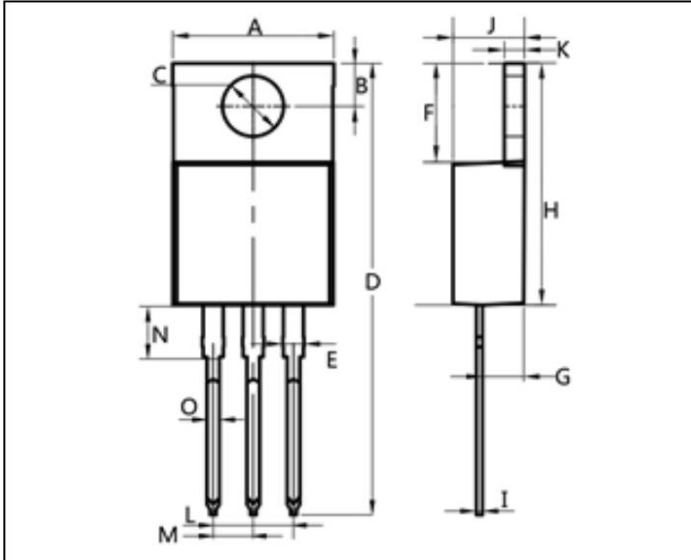
Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MBR20150CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR20150FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR20150DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR20150DC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	800pcs/box 4000pcs/carton
MBR20150CS	TO-252	0.011oz(0.32g)	2500 pcs / reel	2500pcs/box 12500pcs/carton

Note: For Halogen Free molding compound, add "H" suffix to part number above.

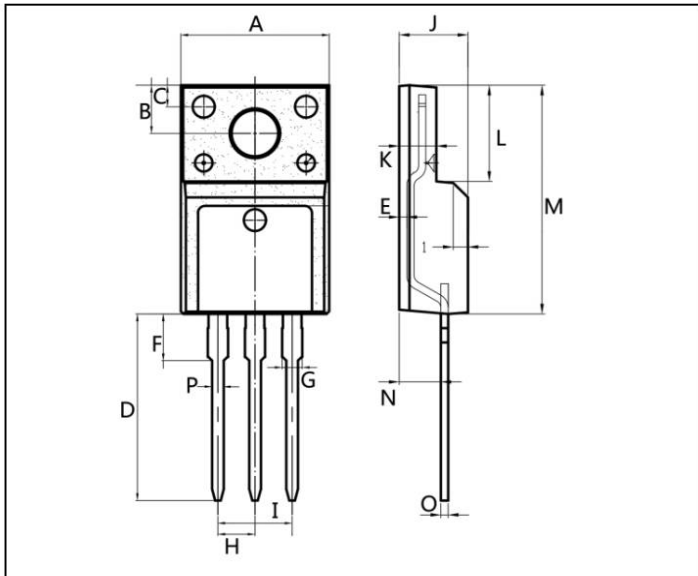
MBR20150CT/FCT/DC/CS

Package Outline Dimensions millimeters

TO-220AB

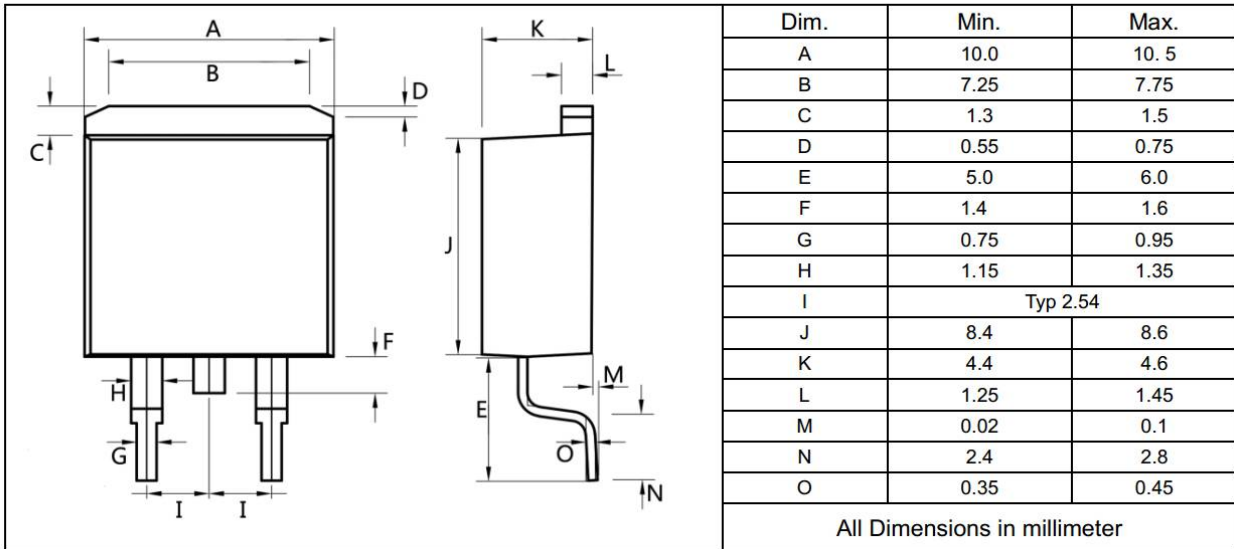
	Dim.	Min.	Max.
	A	10.0	10.4
	B	2.5	3.0
	C	3.5	4.0
	D	28.0	30.0
	E	1.1	1.5
	F	6.2	6.6
	G	2.9	3.3
	H	15.0	16.0
	I	0.35	0.45
	J	4.3	4.7
	K	1.2	1.4
	L	Typ 5.08	
	M	Typ 2.54	
N	3.1	3.5	
O	0.7	0.9	
All Dimensions in millimeter			

TO-220F

	Dim.	Min.	Max.
	A	9.9	10.3
	B	2.9	3.5
	C	1.15	1.45
	D	12.75	13.25
	E	0.55	0.75
	F	3.1	3.5
	G	1.25	1.45
	H	Typ 2.54	
	I	Typ 5.08	
	J	4.55	4.75
	K	2.4	2.7
	L	6.35	6.75
	M	15.0	16.0
N	2.75	3.15	
O	0.45	0.60	
P	0.7	0.9	
All Dimensions in millimeter			

MBR20150CT/FCT/DC/CS

TO-263



TO-252

