

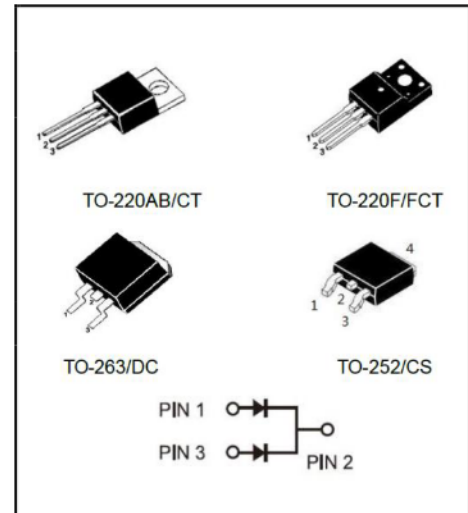
SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 200 V

Forward Current - 10 A

FEATURES

- ♦Low forward voltage
- ♦High current capability
- ♦High forward surge capability
- ♦Low power losses, High efficiency
- ♦Guarding for over voltage protection
- ♦Lead free in comply with EU RoHS 2011/65/EU directives



MECHANICAL DATA

- ♦Case: TO-220AB/CT TO-220F/FCT TO-263/DC TO-252/CS
- ♦Solder bath temperature 275°C maximum, 10s per JESD22-106

Primary Characteristic

I_o	2*5A
V_{RRM}	200V
I_{FSM}	130A
V_F	0.72V
$T_J \text{ Max}$	150°C

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

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS voltage	V_{RMS}	200	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current	Per Leg	5	A
	Total	10	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	I_{FSM}	130	A
Operating Temperature Range	T_J	-55 ~ +150	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C
Typical Thermal Resistance (Note1) TO-220AB, TO-263 TO-252 TO-220F	$R_{\theta JA} / R_{\theta JC}$	2/4	°C/W

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

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)		V _F	Typ	Max	V
at I _F =2A	TA=25°C		0.77	-	
	TA=125°C		0.63	-	
at I _F =3A	TA=25°C		0.80	-	
	TA=125°C		0.67	-	
at I _F =5A	TA=25°C		0.85	0.92	
	TA=125°C		0.72	-	
Maximum Reverse Current at V _R =200V	TA=25°C	I _R	1	5	uA
	TA=125°C		0.5	-	mA

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

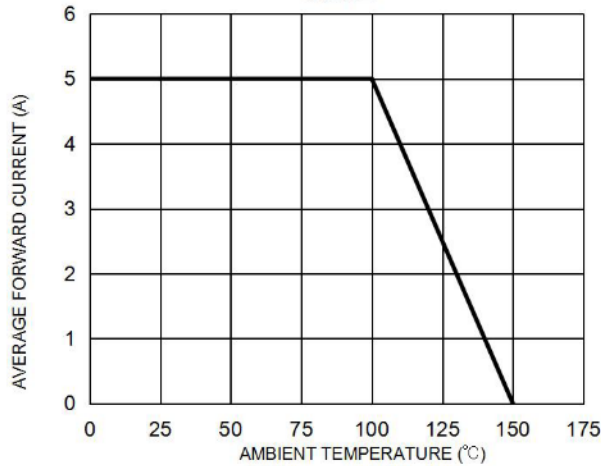


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

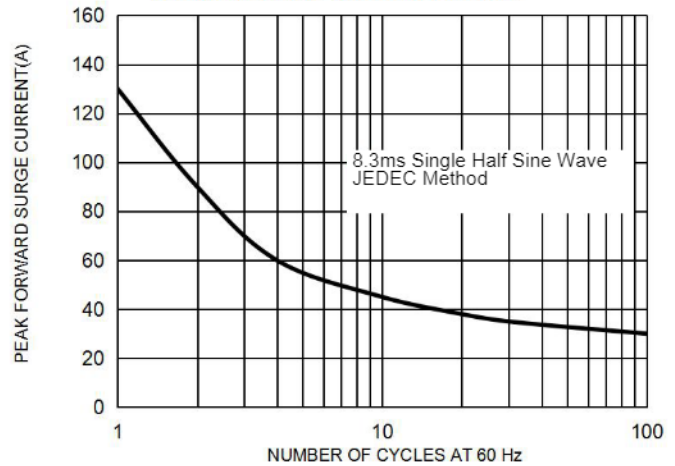


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

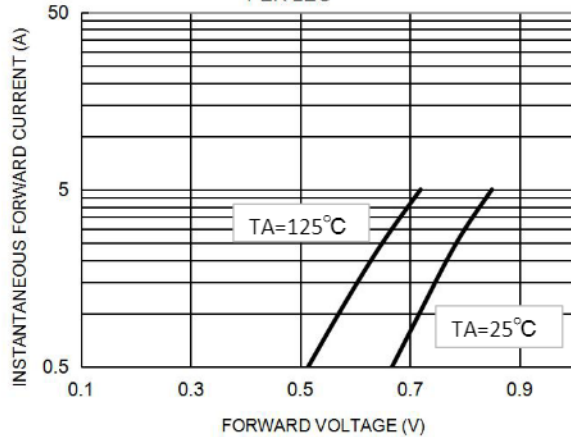
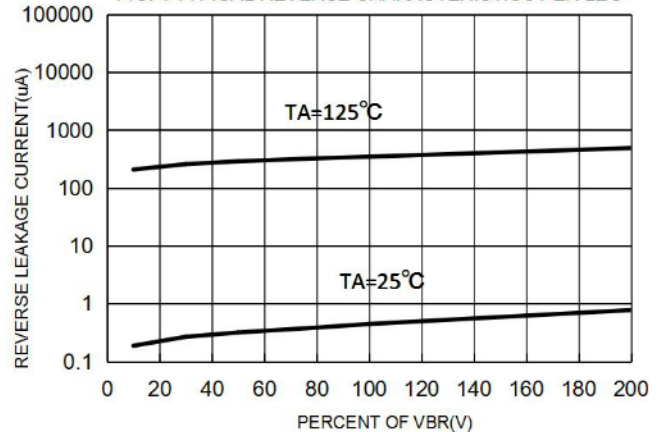
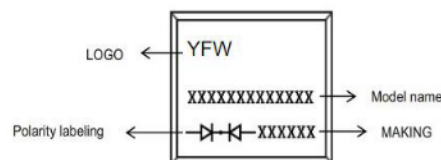


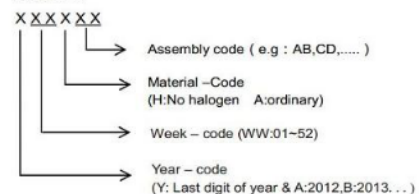
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



MAKING:



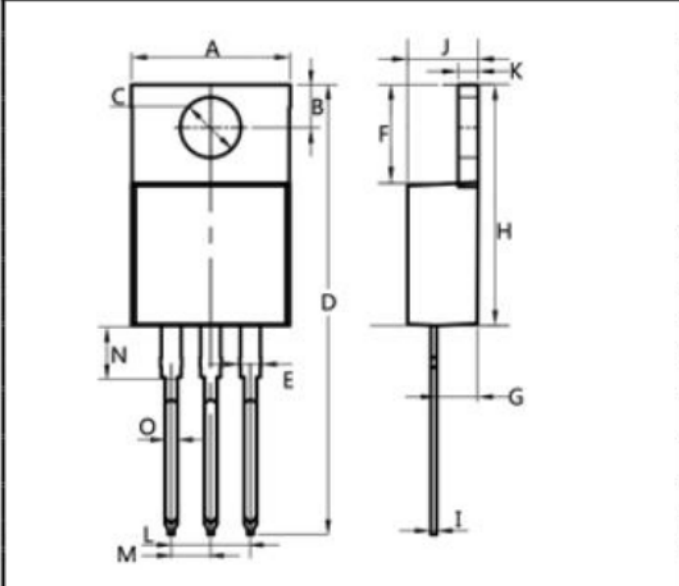
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MBR10200CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR10200FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR10200DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR10200DC-R	O-263	0.04oz(1.16g)	800 pcs / reel	800pcs/box 4000pcs/carton
MBR10200CS	TO-252	0.011oz(0.32g)	2500 pcs / reel	2500pcs/box 12500pcs/carton

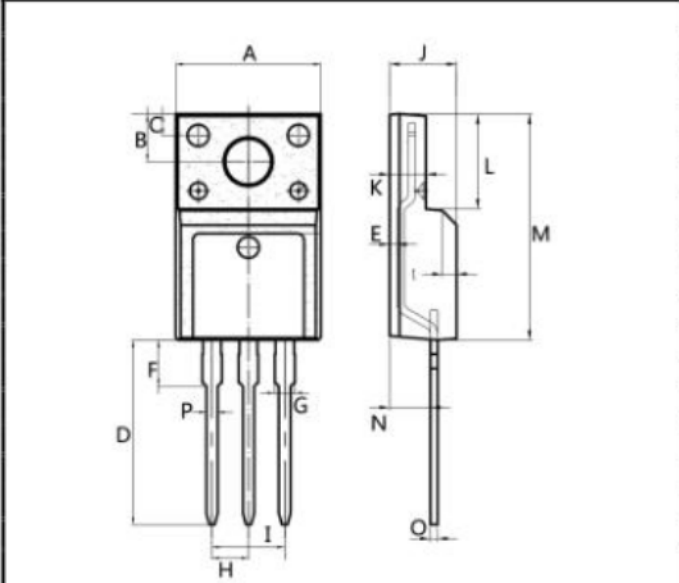
Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

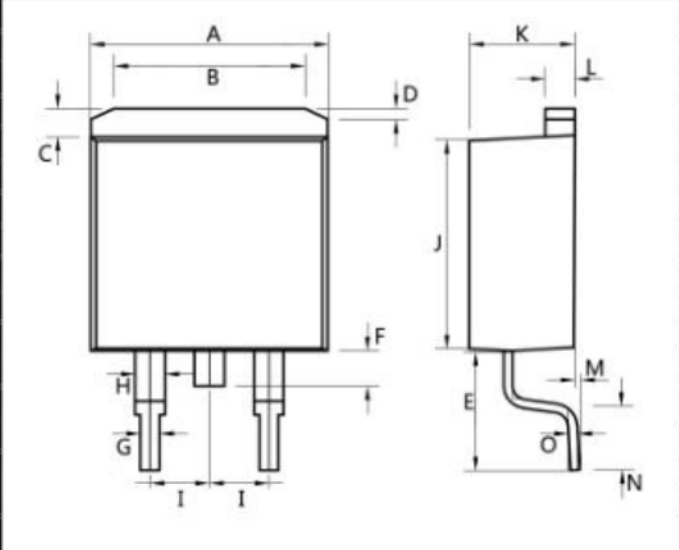
TO-220AB

	Dim.	Min.	Max.
	A	10.15	10.35
	B	2.65	2.95
	C	3.70	3.90
	D	28.5	29.5
	E	1.30	1.45
	F	6.35	6.55
	G	2.9	3.3
	H	15.0	16.0
	I	0.38	0.42
	J	4.45	4.55
	K	1.25	1.35
	L	Typ 5.08	
	M	Typ 2.54	
	N	3.1	3.3
	O	0.76	0.84
All Dimensions in millimeter			

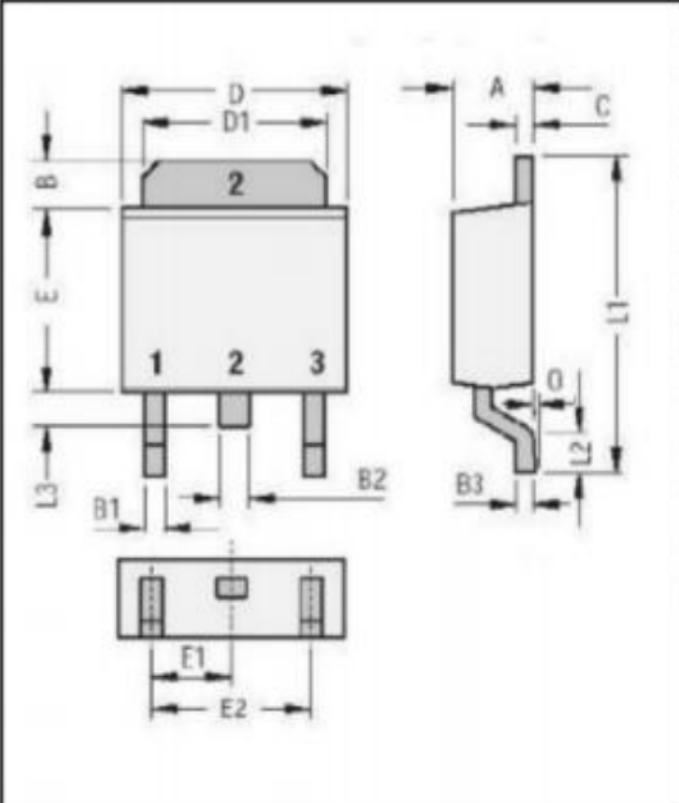
TO-220F

	Dim.	Min.	Max.
	A	9.95	10.25
	B	2.95	3.25
	C	1.25	1.45
	D	12.95	13.25
	E	0.50	0.65
	F	3.1	3.3
	G	1.30	1.45
	H	Typ 2.54	
	I	Typ 5.08	
	J	4.60	4.75
	K	2.50	2.65
	L	6.35	6.55
	M	15.4	16.0
	N	2.75	3.05
	O	0.48	0.52
	P	0.76	0.84
All Dimensions in millimeter			

TO-263

	Dim.	Min.	Max.
	A	10.1	10.2
	B	7.4	7.6
	C	1.3	1.5
	D	0.55	0.75
	E	5.0	6.0
	F	1.4	1.6
	G	0.78	0.86
	H	1.2	1.3
	I	Typ 2.54	
	J	8.4	8.6
	K	4.45	4.55
	L	1.25	1.35
	M	0.02	0.1
	N	2.4	2.8
	O	0.36	0.40
All Dimensions in millimeter			

TO-252

	Dim.	Min.	Max.
	A	2.1	2.5
	B	0.95	1.55
	C	0.4	0.6
	D	6.4	6.7
	D1	5.1	5.8
	E	5.8	6.4
	E1	Typ2.3	
	E2	Typ4.6	
	B1	0.6	0.8
	B2	0.75	0.95
	O	--	0.15
	L1	9.0	11.0
	L2	1.3	1.7
	L3	0.70	0.95
All Dimensions in millimeter			