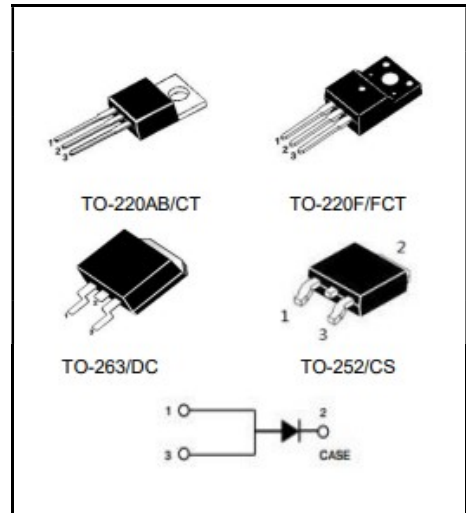


SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 100 V

Forward Current - 20 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	20A
V_{RRM}	100V
I_{FSM}	200A
V_F	0.68V
T_J 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}	100	V
Working Peak Reverse Voltage	V_{RWM}	100	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	I_o	20	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	I_{FSM}	200	A
Operating Temperature Range	T_J	-40 ~ +150	°C
Storage Temperature Range	T_{STG}	-40 ~ +150	°C
Typical Thermal Resistance ^(Note1)	R_{θJA} R_{θJC}	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	
		Typ	Max		
Forward Voltage Drop(Note2)	V_F	0.48	-	V	
at I _F =3A					TA=25°C
		TA=125°C			
at I _F =5A		TA=25°C			
		TA=125°C			
at I _F =10A		TA=25°C	0.67		0.7
		TA=125°C	0.64		-
Maximum Reverse Current at V _R =100V		I_R	4.52		50
	4.37		-	mA	

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

Ratings and Characteristic Curves

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

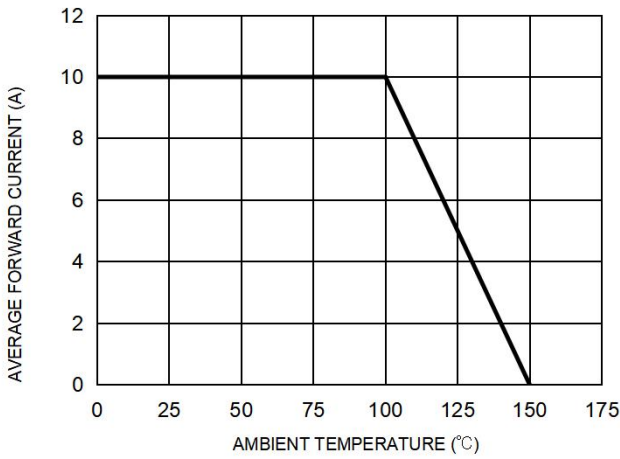


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

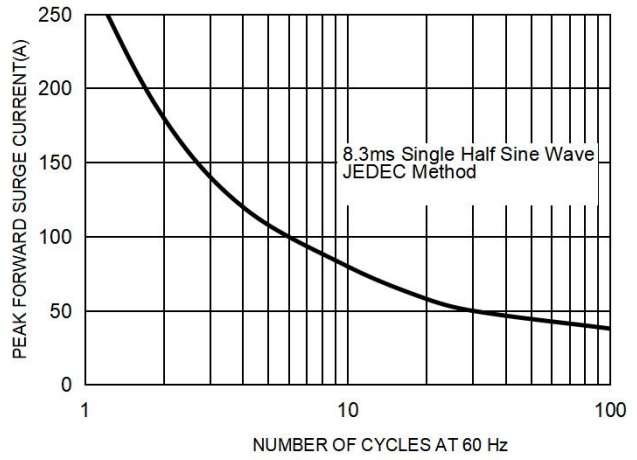


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

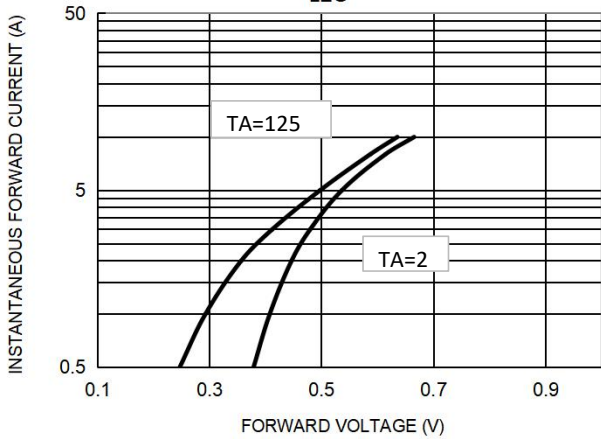
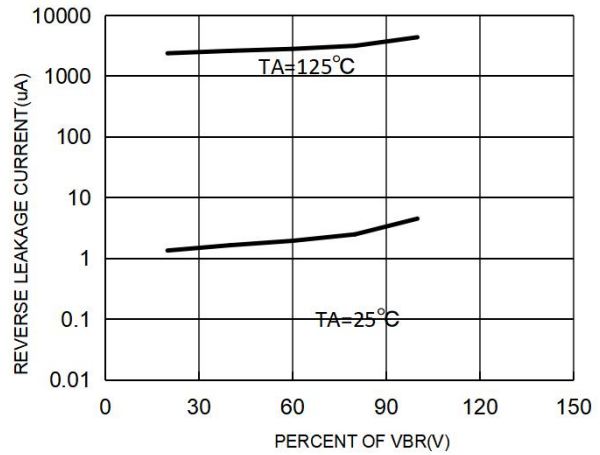
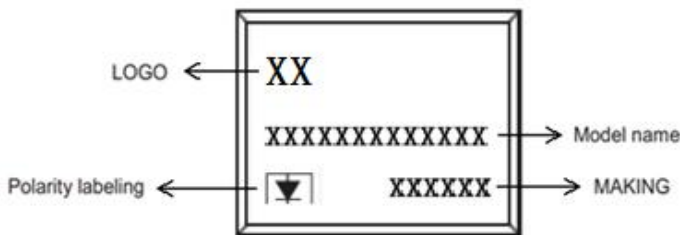


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



MAKING:

X X X X X X

- Assembly code (e.g : AB,CD,.....)
- Material -Code (H:No halogen A:ordinary)
- Week - code (WW:01~52)
- Year - code (Y: Last digit of year & A:2012,B:2013. . .)

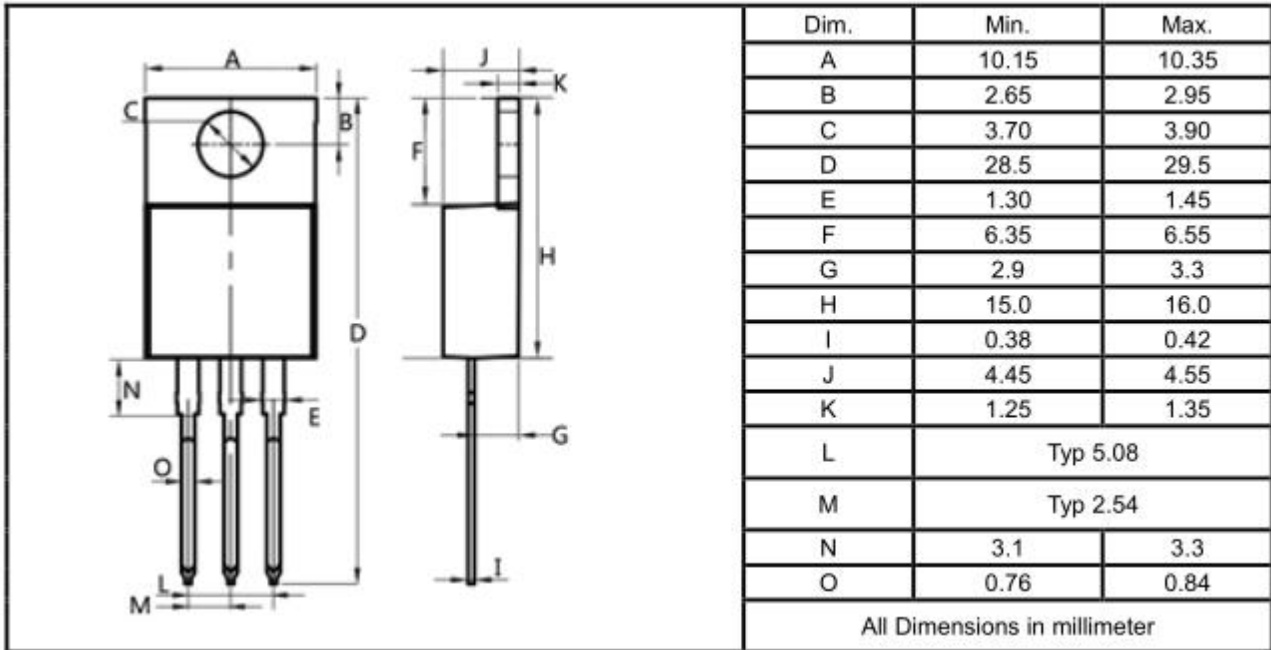
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MBR20100CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR20100FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR20100DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR20100DC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	800pcs/box4000pcs/carton
MBR20100CS	TO-252	0.011oz(0.32g)	2500 pcs / reel	2500pcs/box 12500pcs/carton

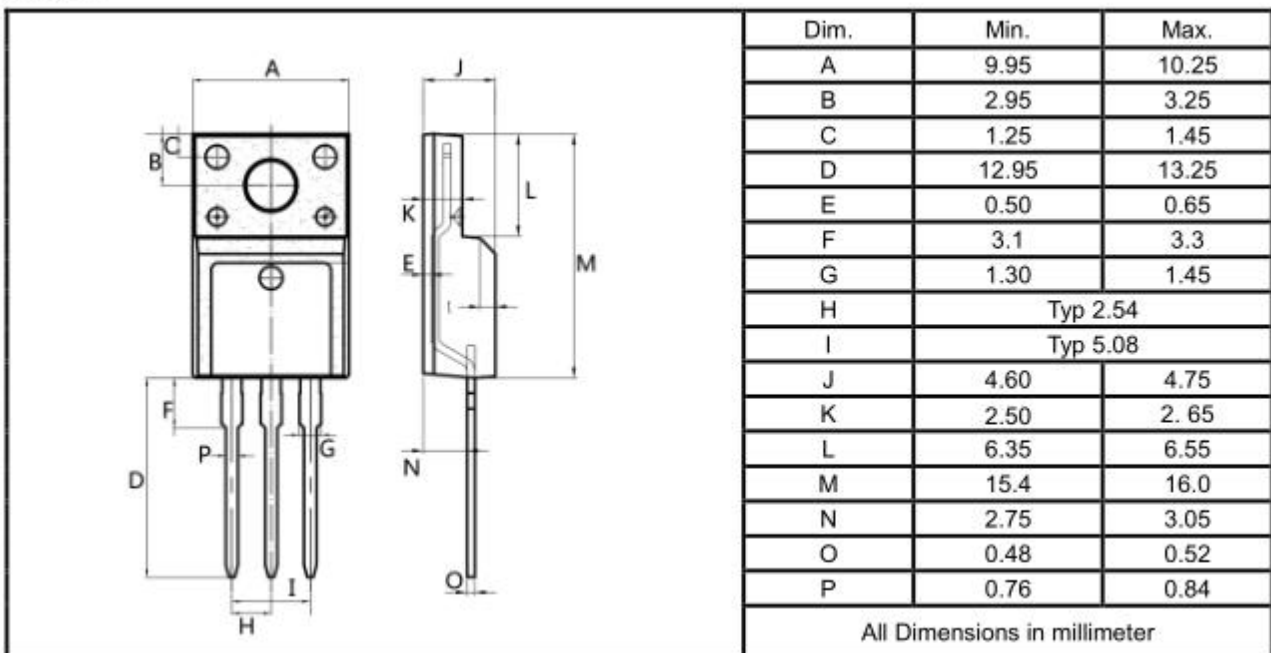
Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

TO-220AB

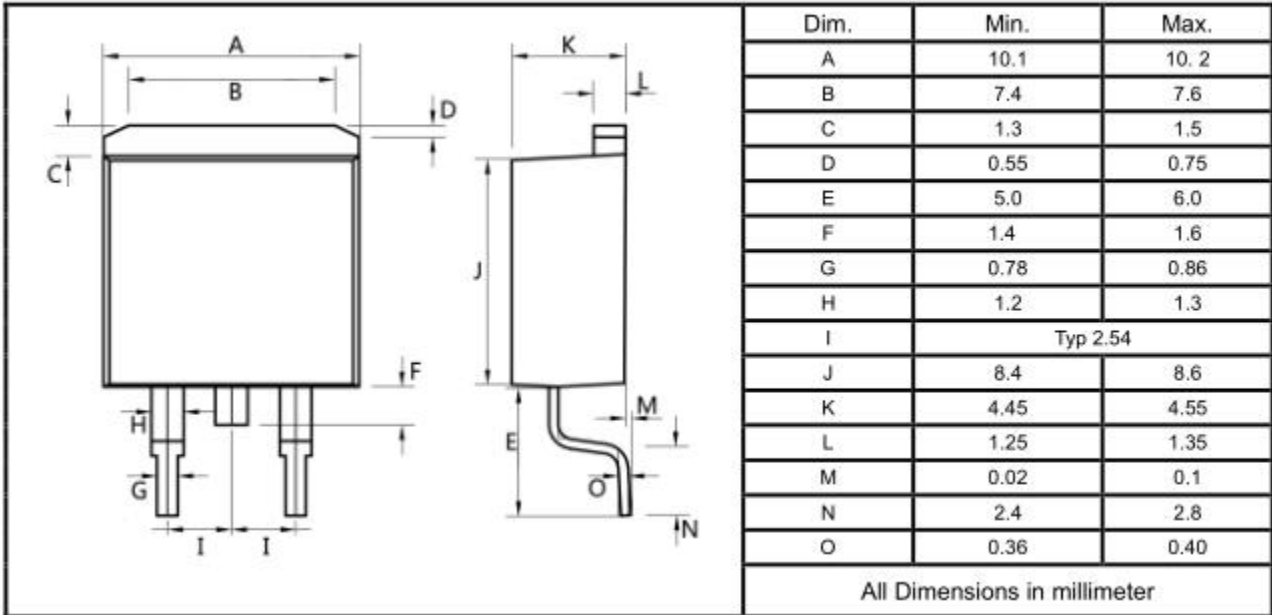


TO-220F



Package Outline Dimensions millimeters

TO-263



TO-252

