

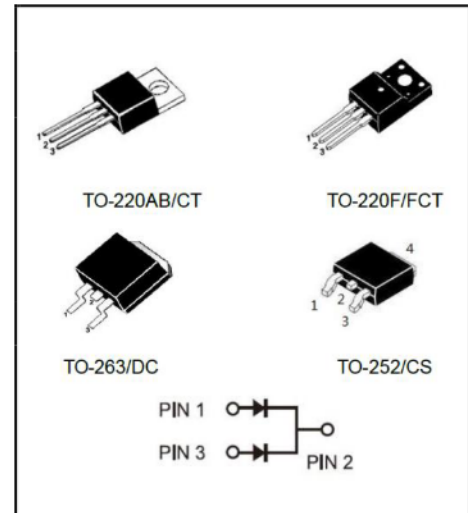
**SCHOTTKY BARRIER RECTIFIER**
**Reverse Voltage - 100 V**
**Forward Current - 10 A**

**FEATURES**

- ◆Very 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**

$I_o$	<b>2*5A</b>
$V_{RRM}$	<b>100V</b>
$I_{FSM}$	<b>200A</b>
$V_F$	<b>0.65V</b>
$T_J$ Max	<b>150°C</b>

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

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS voltage	$V_{RMS}$	100	V
Maximum DC Blocking Voltage	$V_{DC}$	100	V
Maximum Average Forward Rectified Current	Per Leg	5	A
	Total	10	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	$I_{FSM}$	200	A
Operating Temperature Range	$T_J$	-55 ~ +150	°C
Storage Temperature Range	$T_{STG}$	-55 ~ +150	°C
Typical Thermal Resistance <sup>(Note1)</sup> TO-220AB,TO-263 TO-220F TO252	$R_{\theta JA}$ $R_{\theta JC}$	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	
		Typ	Max		
Forward Voltage Drop(Note2) at $I_F=2A$ at $I_F=3A$ at $I_F=5A$	$V_F$	TA=25°C	0.68	-	V
		TA=125°C	0.56	-	
		TA=25°C	0.72	-	
		TA=125°C	0.60	-	
		TA=25°C	0.76	0.85	
		TA=125°C	0.65	-	
Maximum Reverse Current at $V_R=100V$	$I_R$	TA=25°C	1	5	uA
		TA=125°C	0.6	-	mA

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

**RATINGS AND CHARACTERISTIC CURVES**

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

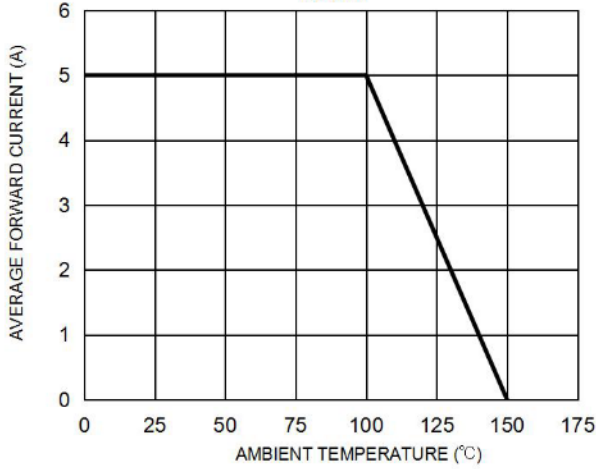


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

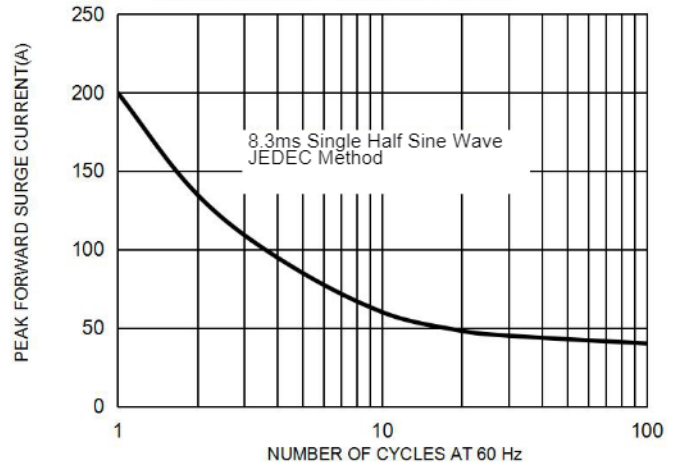


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

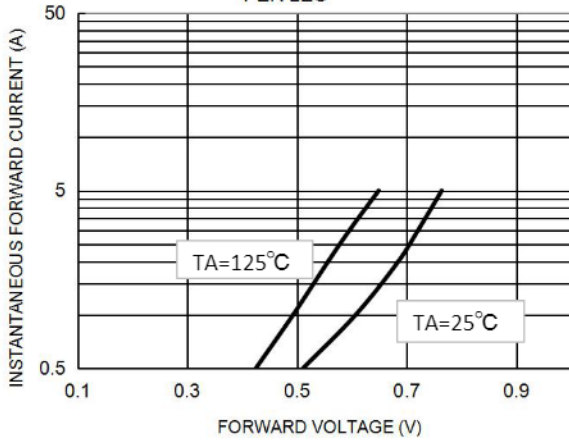
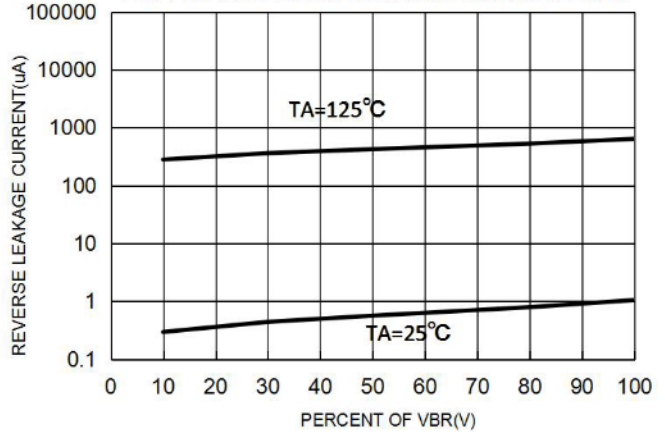
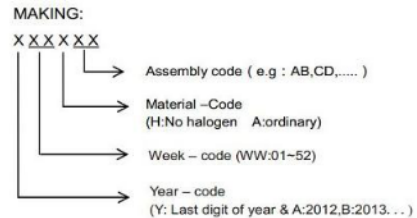
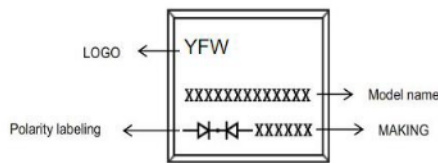


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



**Marking on the body**



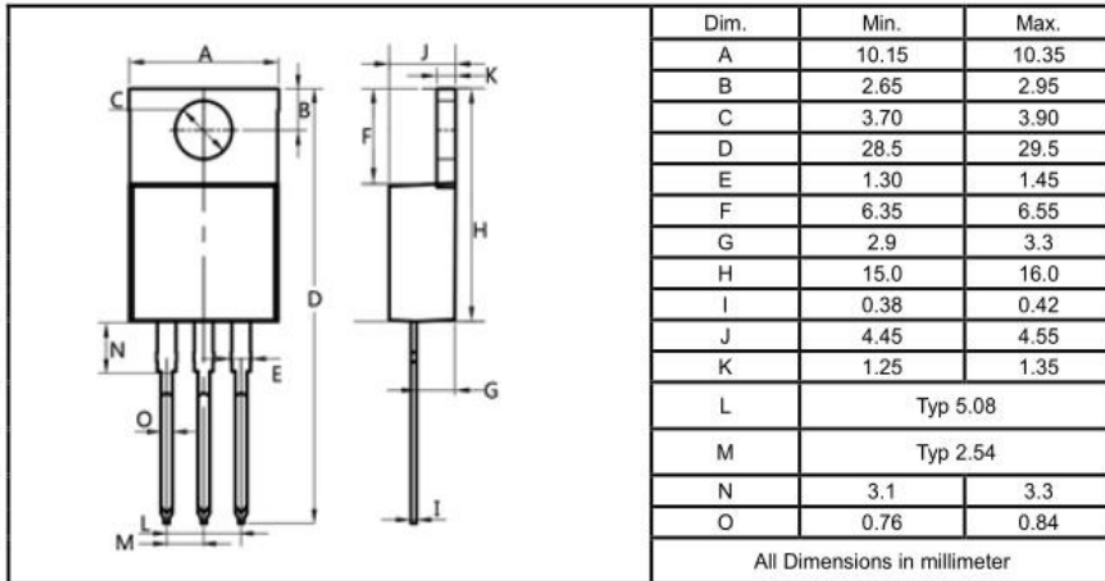
**Ordering information**

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MBR10100CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR10100FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR10100DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR10100DC-R	O-263	0.04oz(1.16g)	800 pcs / reel	800pcs/box4000pcs/carton
MBR10100CS	TO-252	0.011oz(0.32g)	2500 pcs / reel	2500pcs/box 12500pcs/carton

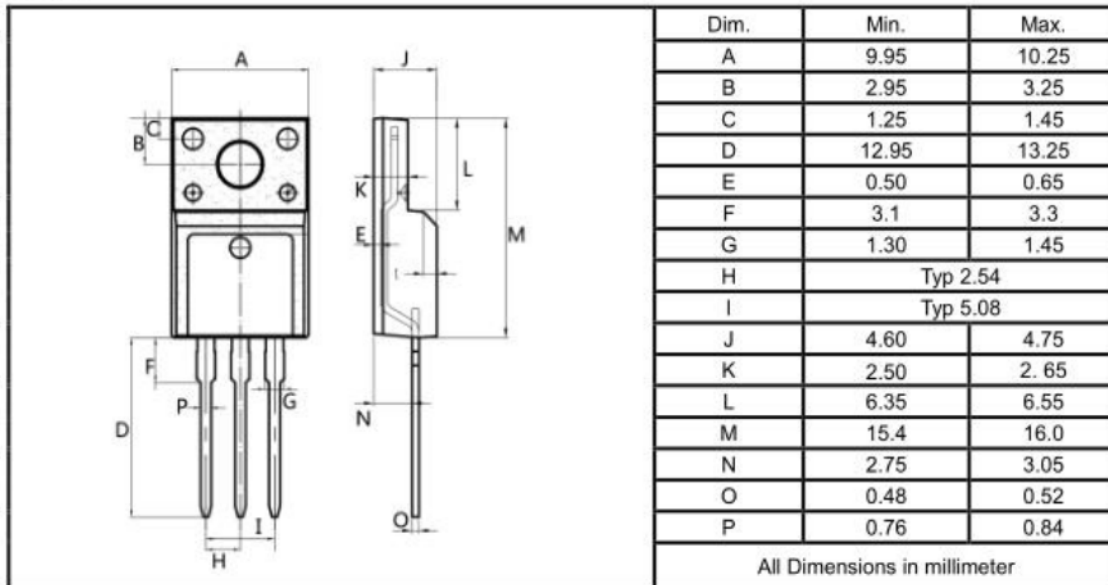
Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

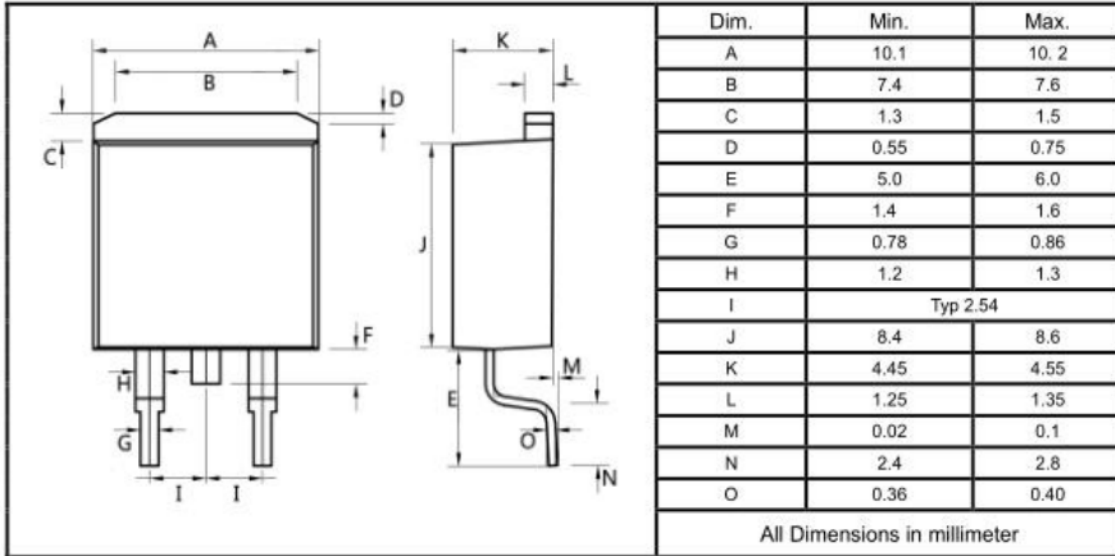
**TO-220AB**



**TO-220F**



**TO-263**



**TO-252**

