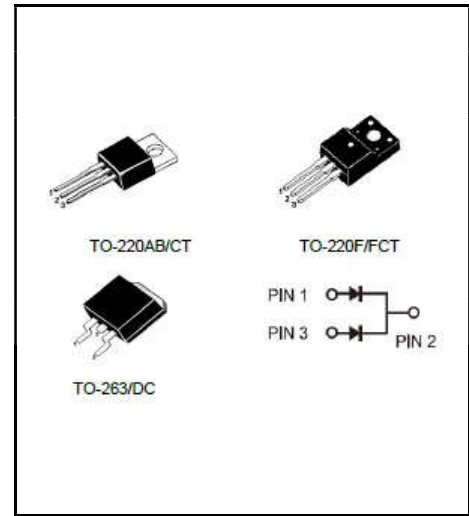


**ULTRAFST RECOVERY RECTIFIERS**
**Reverse Voltage - 200 V**
**Forward Current - 10 A**
**FEATURES**

- ◆High speed switching capability
- ◆High current capability
- ◆High forward surge capability
- ◆Low power losses, High efficiency
- ◆For use in low voltage, high frequency inverters
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

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


**Primary Characteristic**

<b>I<sub>o</sub></b>	<b>2*5A</b>
<b>V<sub>R</sub>RM</b>	<b>200V</b>
<b>I<sub>F</sub>SM</b>	<b>90A</b>
<b>V<sub>F</sub></b>	<b>0.95V</b>
<b>T<sub>J</sub> Max</b>	<b>150°C</b>

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

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	<b>V<sub>R</sub>RM</b>	200	<b>V</b>
Maximum RMS voltage	<b>V<sub>R</sub>MS</b>	140	<b>V</b>
Maximum DC Blocking Voltage	<b>V<sub>D</sub>C</b>	200	<b>V</b>
Maximum Average Forward Rectified Current	Per Leg	5	<b>A</b>
	Total	10	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	<b>I<sub>F</sub>SM</b>	90	<b>A</b>
Operating Temperature Range	<b>T<sub>J</sub></b>	150	<b>°C</b>
Storage Temperature Range	<b>T<sub>STG</sub></b>	-40 ~ +150	<b>°C</b>
Typical Thermal Resistance (Note1) TO-220AB/CT TO-220F/FCT TO-263/DC	<b>R<sub>θJA</sub>/ R<sub>θJC</sub></b>	2/4	<b>°C/W</b>

**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)	<b>V<sub>F</sub></b>	0.87	-	<b>V</b>
at I <sub>F</sub> =3A				
		TA=125°C		
at I <sub>F</sub> =5A		TA=25°C		
	TA=125°C	0.95	-	
		0.90	-	
Maximum Reverse Current at V <sub>R</sub> =200V	<b>I<sub>R</sub></b>	0.50	5	<b>uA</b>
		250	-	<b>uA</b>
Maximum Reverse Recovery Time at I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, I <sub>RR</sub> =0.25A	<b>T<sub>RR</sub></b>	-	35	<b>nS</b>

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

**RATINGS AND CHARACTERISTIC CURVES**

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

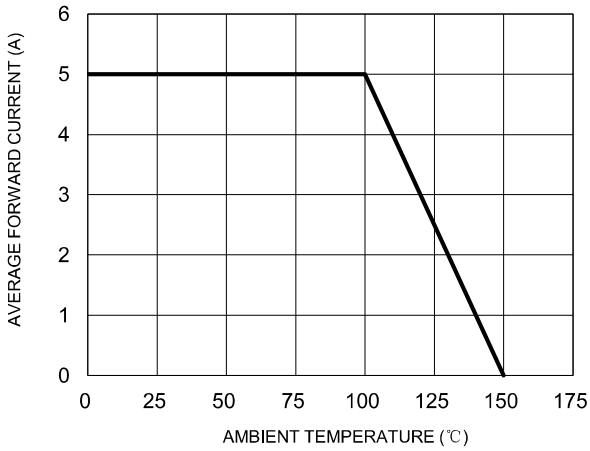


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

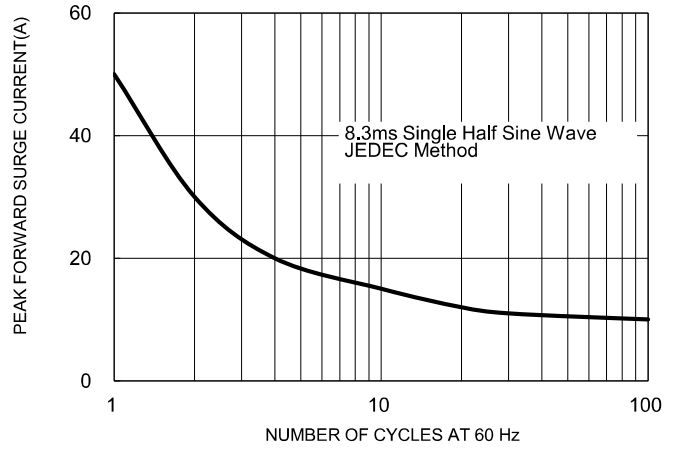


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

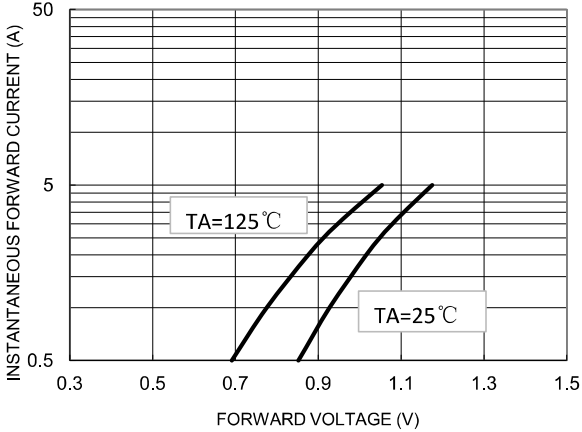
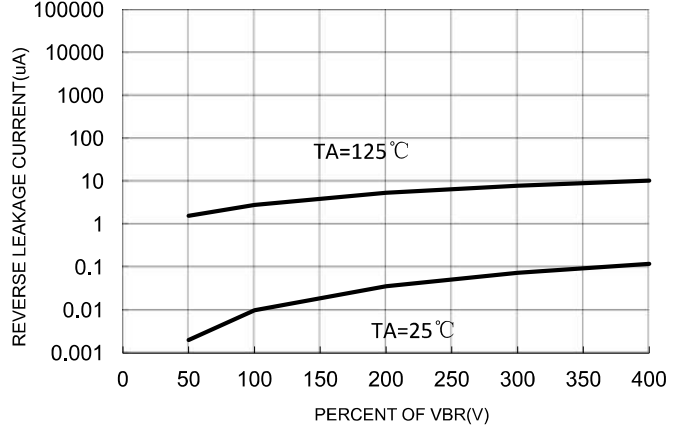
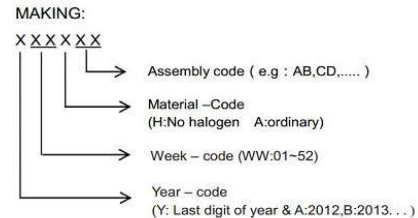
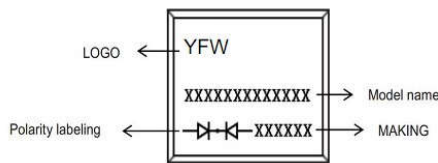


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



**Marking on the body**



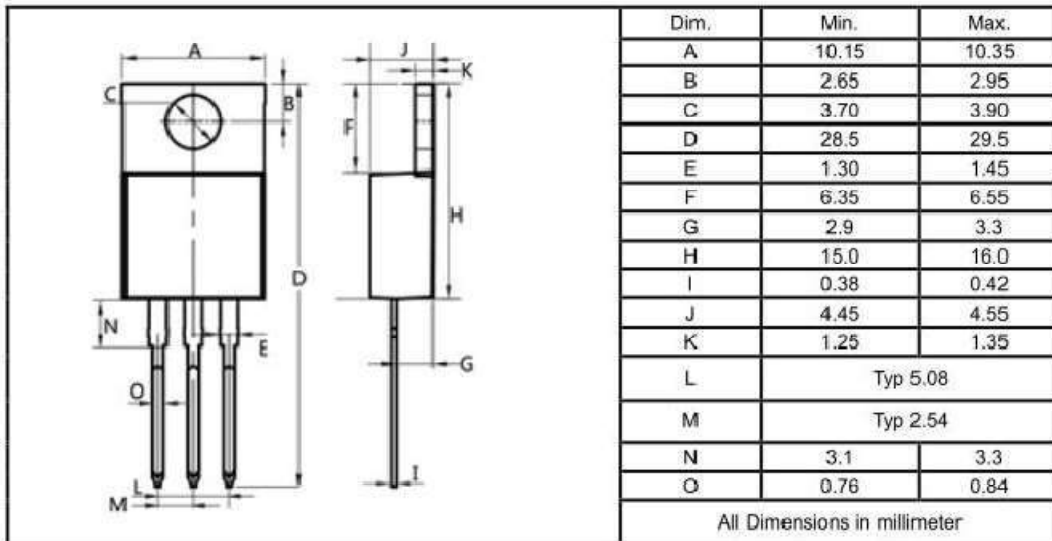
**Ordering information**

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR1020CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1020FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1020DC-G	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1020DC	TO-263	0.04oz(1.16g)	800 pcs / reel	1600pcs/box4000pcs/carton

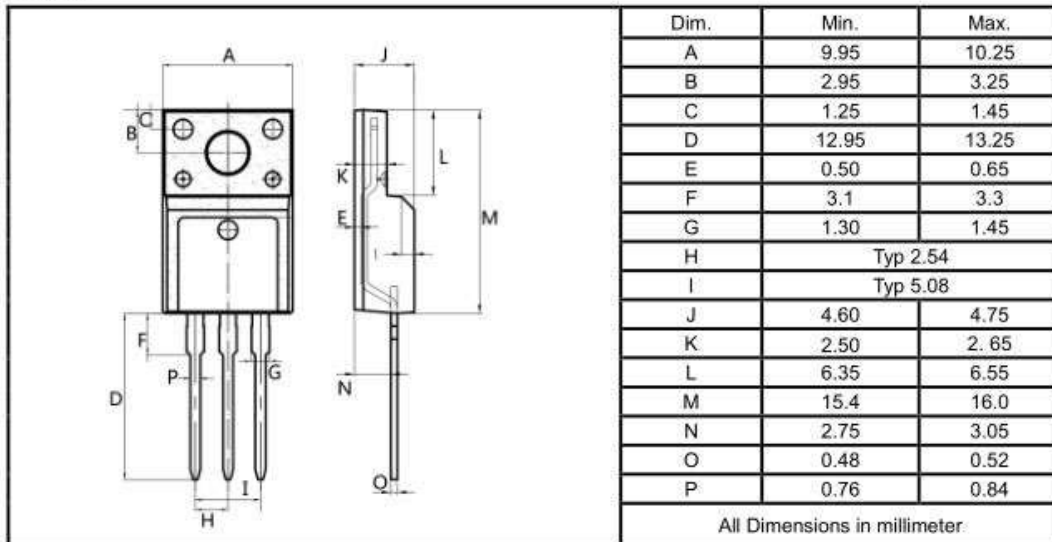
Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

**TO-220AB**



**TO-220F**



**TO-263**

