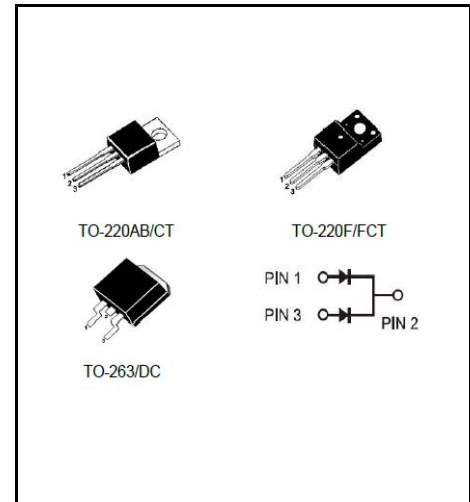


ULTRAFST RECOVERY RECTIFIERS
Reverse Voltage -200 V
Forward Current - 30A
FEATURES

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


Primary Characteristic

I_o	2*15A
V_{RRM}	200V
I_{FSM}	150A
V_F	0.88V
T_J Max	175°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}	140	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current	Per Leg	15	A
	Total	30	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	I_{FSM}	150	A
Operating Temperature Range	T_J	175	°C
Storage Temperature Range	T_{STG}	-55 ~ +175	°C
Typical Thermal Resistance (Note1) TO-220AB TO-263 TO-220F	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	0.79	-	V
at IF=3A				
		TA=125°C		
at IF=5A		TA=25°C		
		TA=125°C		
at IF=15A		TA=25°C	0.98	
	TA=125°C	0.88	-	
Maximum Reverse Current at V _R =200V	I_R	0.1	10	uA
		2	-	uA
Maximum Reverse Recovery Time at IF=0.5A, IR=1A, IRR=0.25A	T_{RR}	-	25	nS

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

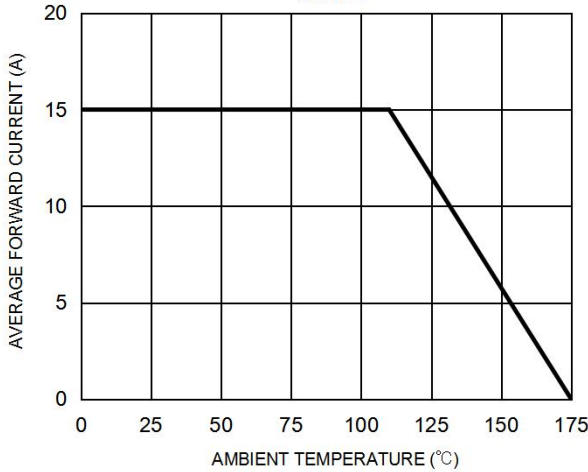


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

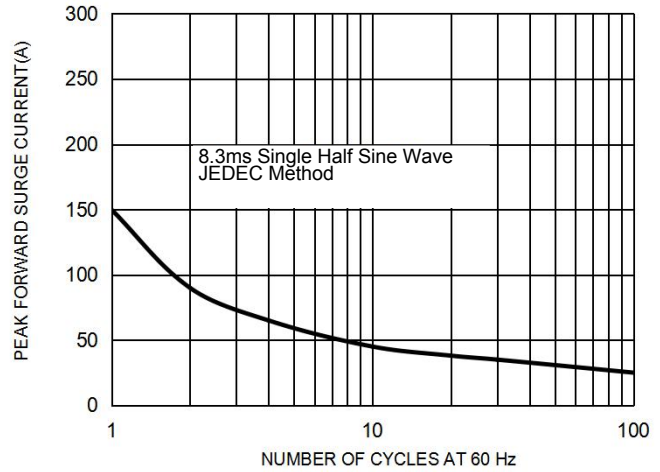


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

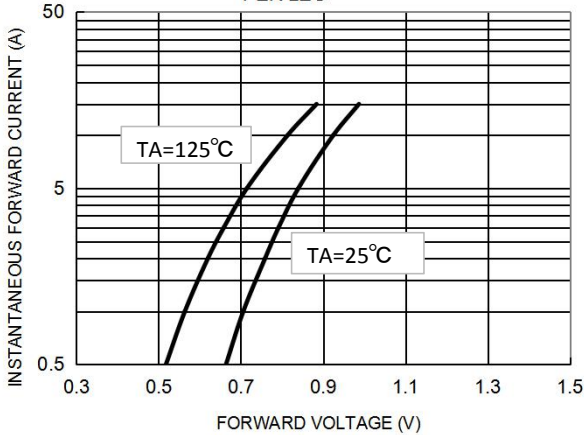
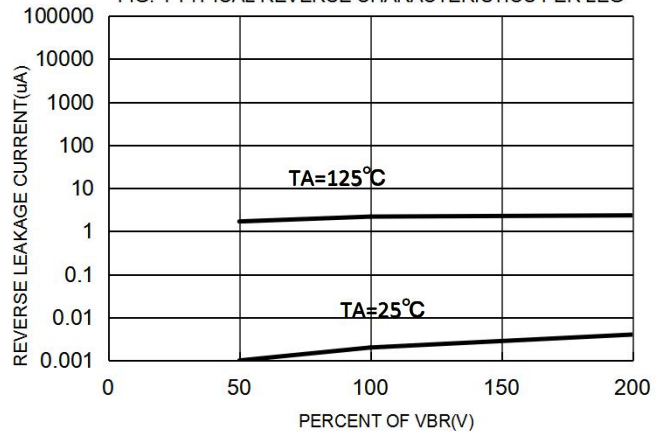
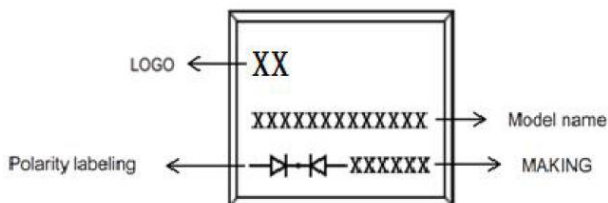


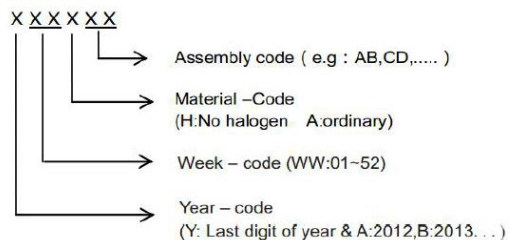
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



MAKING:



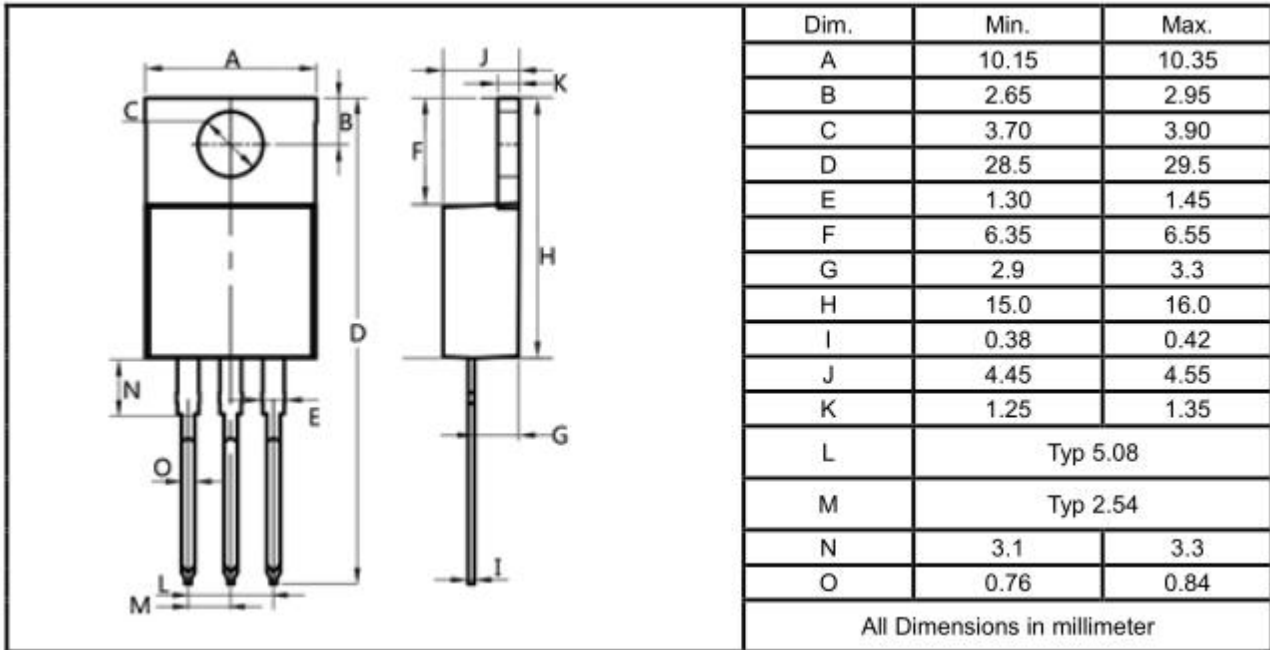
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR3020CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR3020FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR3020DC-G	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR3020DC	TO-263	0.04oz(1.16g)	800 pcs / reel	1600pcs/box 4000pcs/carton

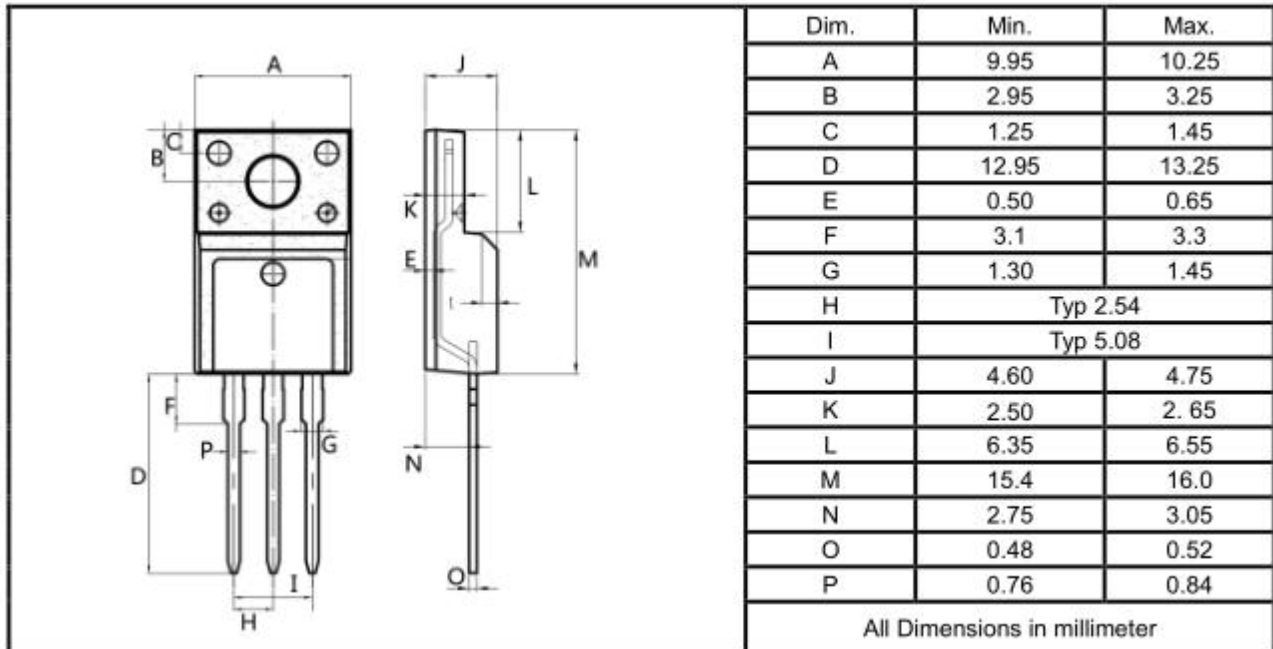
Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

TO-220AB



TO-220F



TO-263

