

ULTRAFST RECOVERY RECTIFIERS
Reverse Voltage -400 V
Forward Current - 20 A
FEATURES

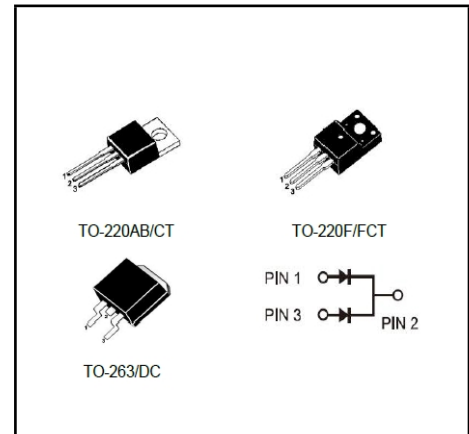
- ◆High speed switching capability
- ◆High current capability
- ◆High forward surge capability
- ◆Low power losses · High efficiency
- ◆For use in low voltage, high frequency inverters
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

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

Primary Characteristic

I_o	2*10A
V_{RRM}	400V
I_{FSM}	160A
V_F	0.95V
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}	400	V
Maximum RMS voltage	V_{RMS}	280	V
Maximum DC Blocking Voltage	V_{DC}	400	V
Maximum Average Forward Rectified Current	Per Leg	10	A
	Total	20	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	I_{FSM}	160	A
Operating Temperature Range	T_J	-40 ~ +150	°C
Storage Temperature Range	T_{STG}	-40 ~ +150	°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	0.91	-	V
at IF=3A				
		TA=125°C		
at IF=5A		TA=25°C		
		TA=125°C		
at IF=10A		TA=25°C	1.08	
	TA=125°C	0.95	-	
Maximum Reverse Current at V _R =400V	I_R	0.01	1	uA
		5	-	uA
Maximum Reverse Recovery Time at IF=0.5A, IR=1A, IRR=0.25A	T_{RR}	-	35	nS

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

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

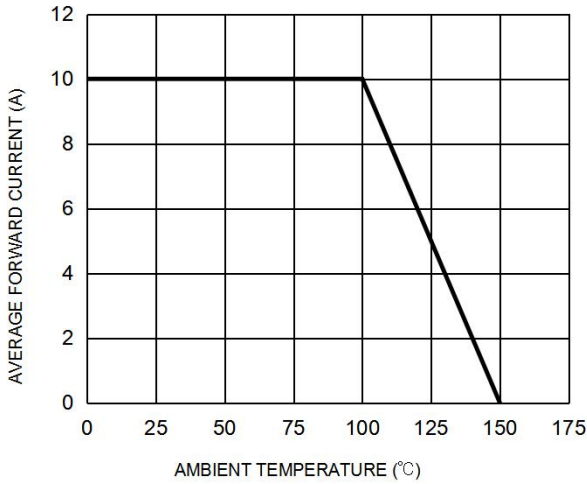


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

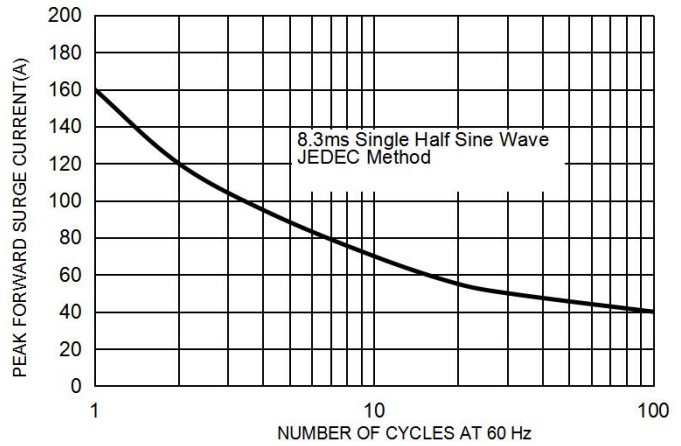


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

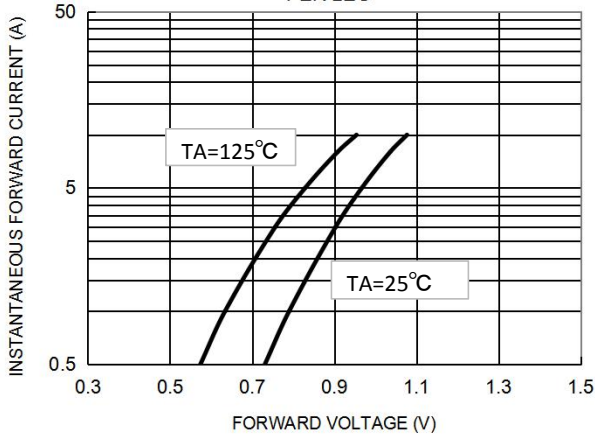
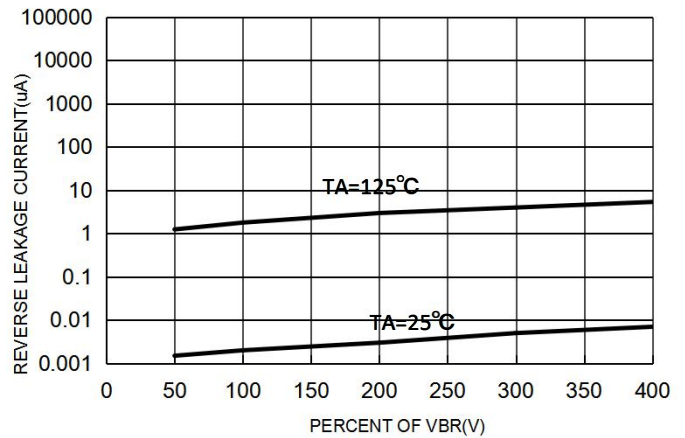
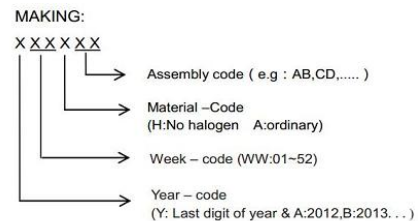
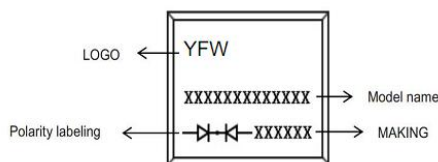


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



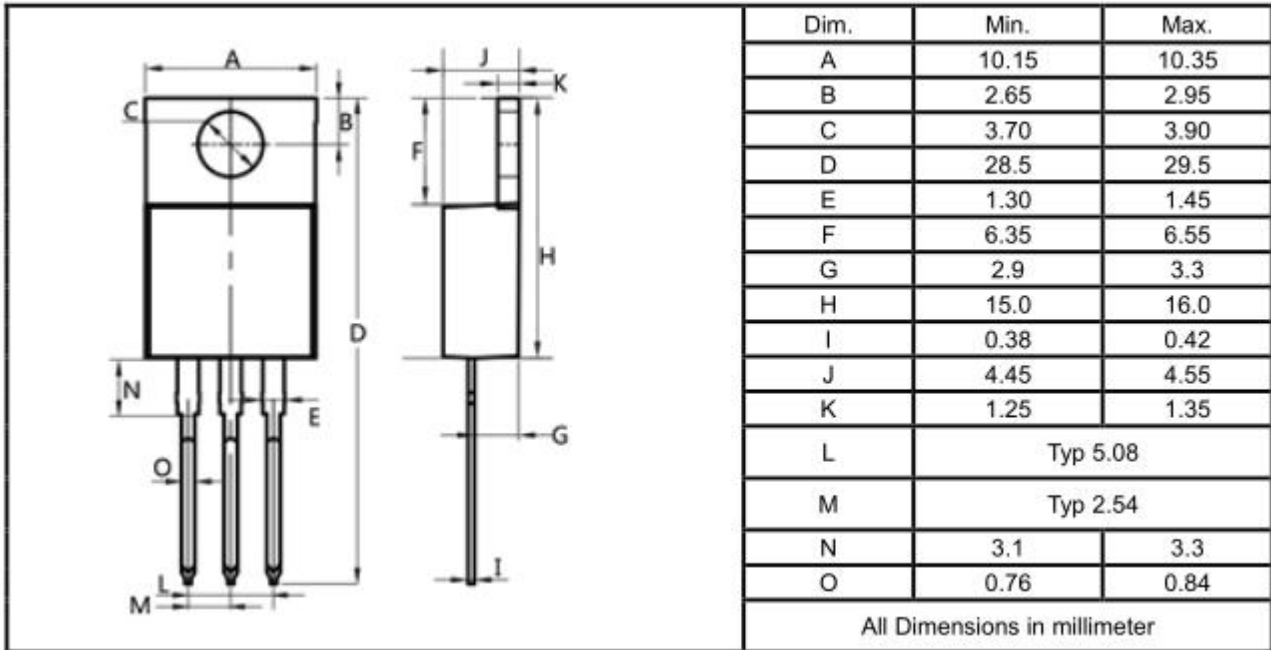
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR2040CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR2040FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR2040DC-G	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR2040DC	TO-263	0.04oz(1.16g)	800 pcs / reel	1600pcs/box4000pcs/carton

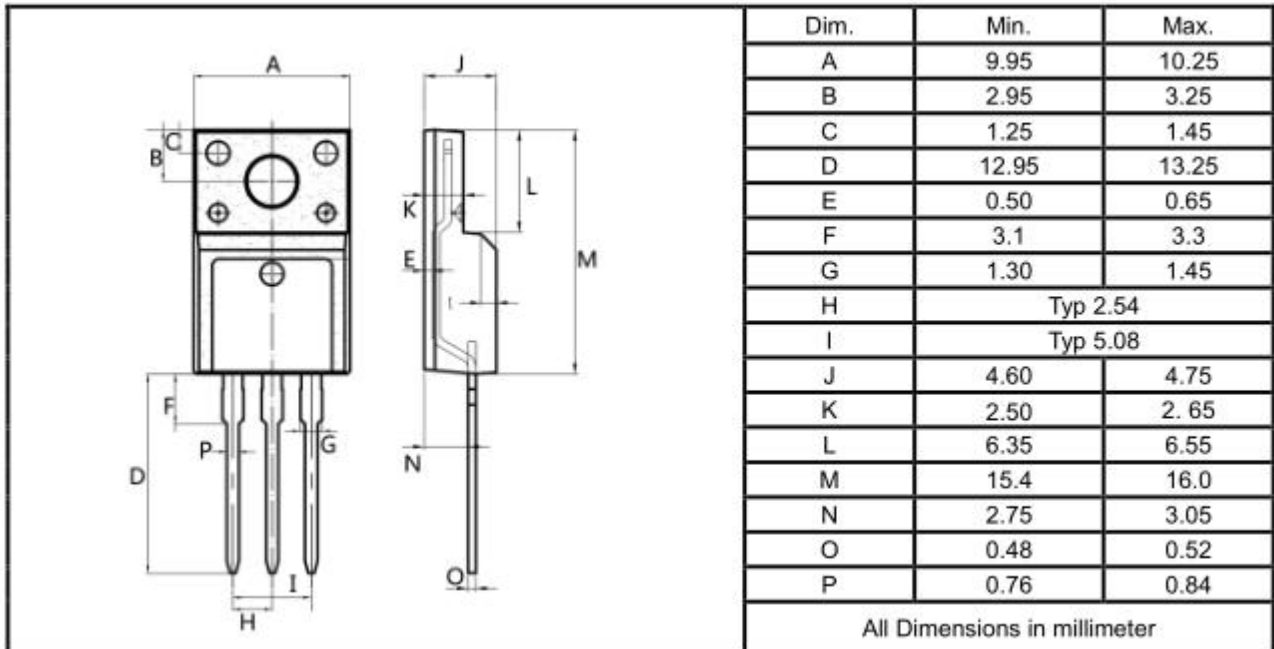
Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

TO-220AB



TO-220F



TO-263

