

ULTRAFST RECOVERY RECTIFIERS

Reverse Voltage - 600 V

Forward Current - 10 A

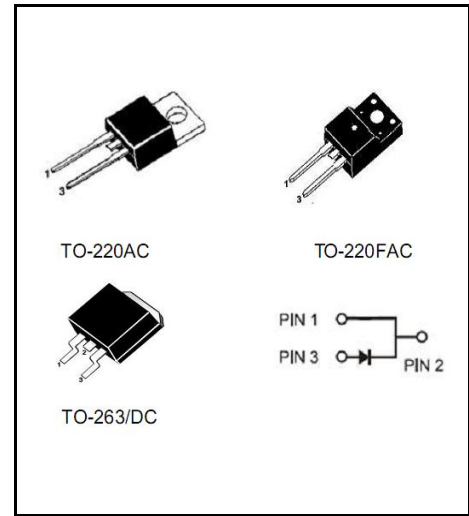


FEATURES

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



Primary Characteristic

I_o	10A
V_{RRM}	600V
I_{FSM}	100A
V_F	1.03V
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}	600	V
Maximum RMS voltage	V_{RMS}	600	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current	I_o	10	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	I_{FSM}	100	A
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-40 ~ +150	°C
Typical Thermal Resistance (Note1) TO-220AC TO-263/DC TO-220FAC	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
Forward Voltage Drop(Note2)		V_F	Typ	Max	V
at IF=3A	TA=25°C		1.05	-	
	TA=125°C		0.84	-	
at IF=5A	TA=25°C		1.15	-	
	TA=125°C		0.93	-	
at IF=8A	TA=25°C		1.25	1.59	
	TA=125°C	1.03	-		
Maximum Reverse Current at V _R =600V	TA=25°C	I_R	0.05	1	uA
	TA=125°C		2	-	uA
Maximum Reverse Recovery Time at IF=0.5A, IR=1A, IRR=0.25A		T_{RR}	-	35.00	nS

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

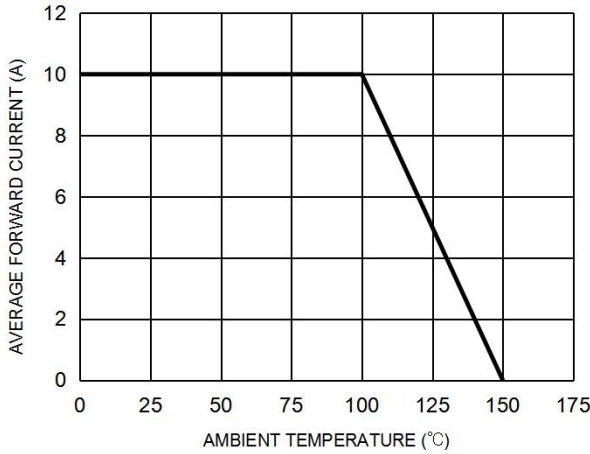


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

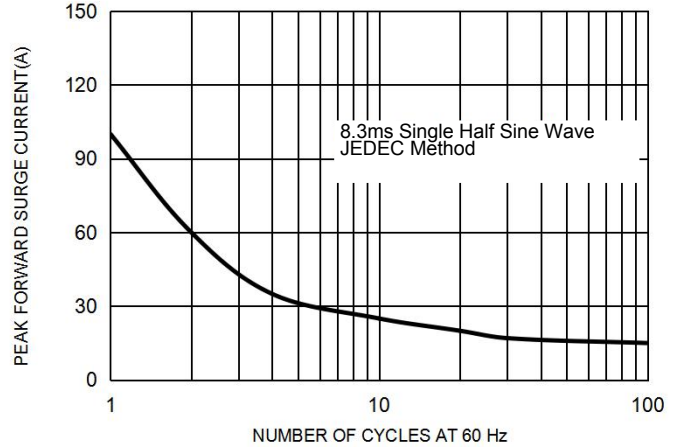


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

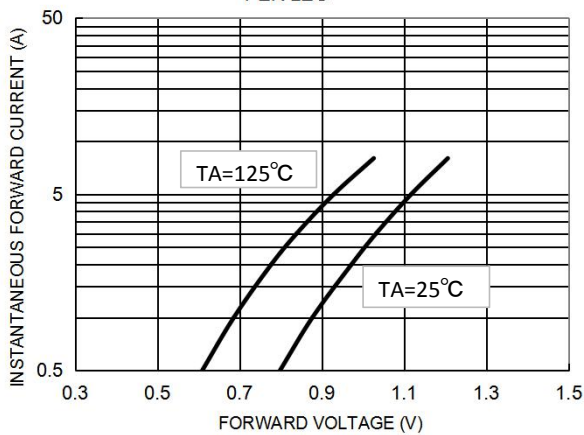
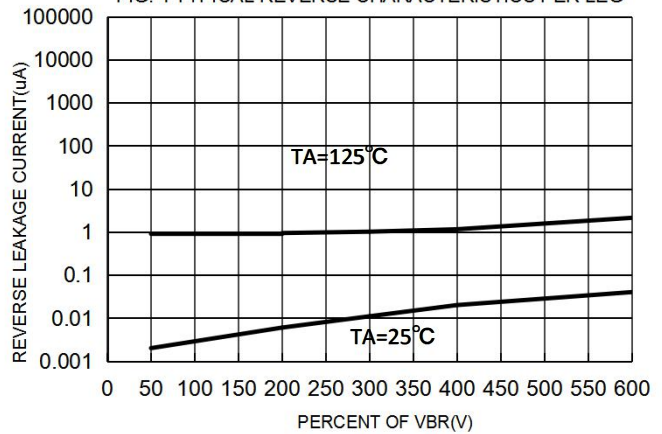
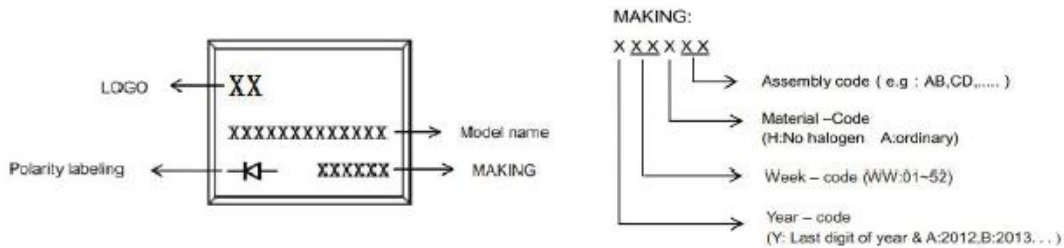


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



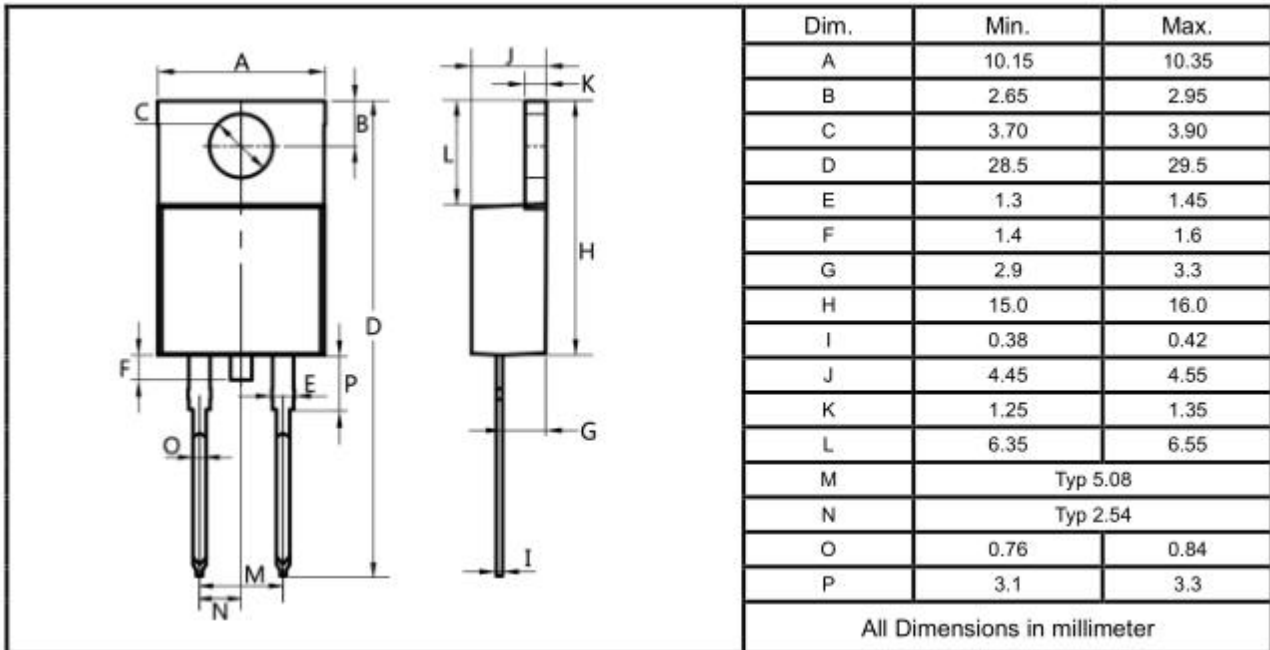
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR1060AC	TO-220AC	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1060FAC	TO-220FAC	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1060DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1060DC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	800pcs/box4000pcs/carton

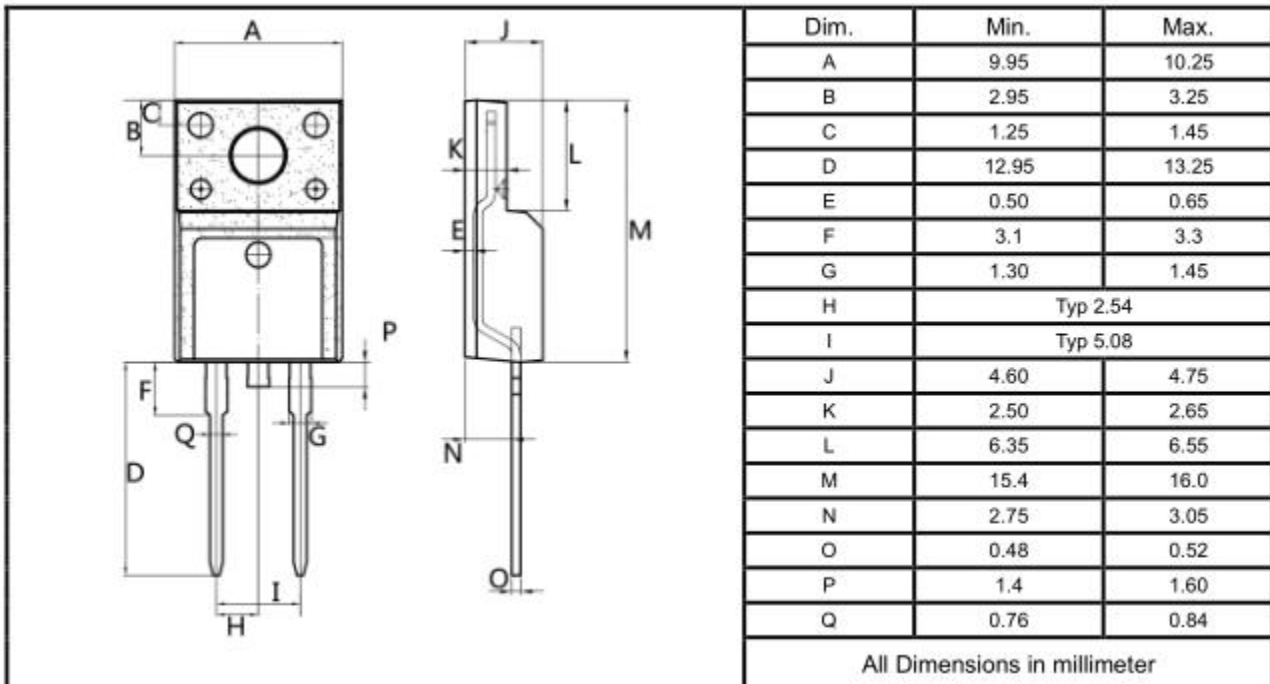
Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

TO-220AC



TO-220FAC



TO-263

