

ULTRAFST RECOVERY RECTIFIERS

Reverse Voltage - 200 V

Forward Current - 30 A

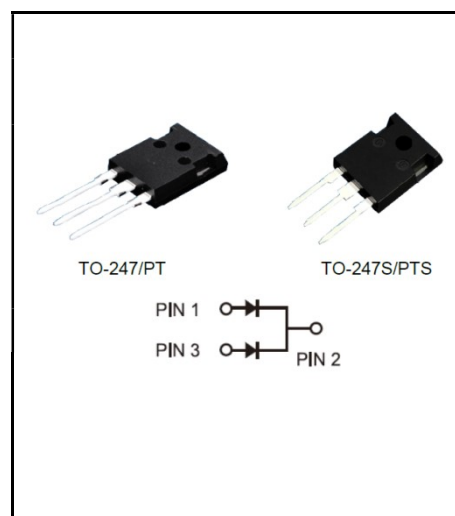


FEATURES

- ◆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-247/PT TO-247/PTS
- ◆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}	200	V
Maximum DC Blocking Voltage		V_{DC}	200	V
Maximum Average Forward Rectified Current	Per Leg	I_o	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-247/PT TO-247/PTS		R_{θJA} R_{θJC}	2	°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		0.79	-	
	TA=125°C		0.65	-	
at IF=5A	TA=25°C		0.84	-	
	TA=125°C		0.71	-	
at IF=15A	TA=25°C		0.98	1.05	
	TA=125°C		0.88	-	
Maximum Reverse Current at V _R =200V	TA=25°C	I_R	0.1	10	uA
	TA=125°C		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

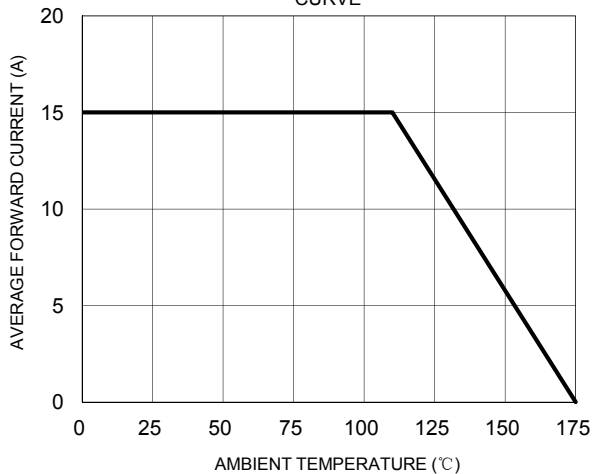


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

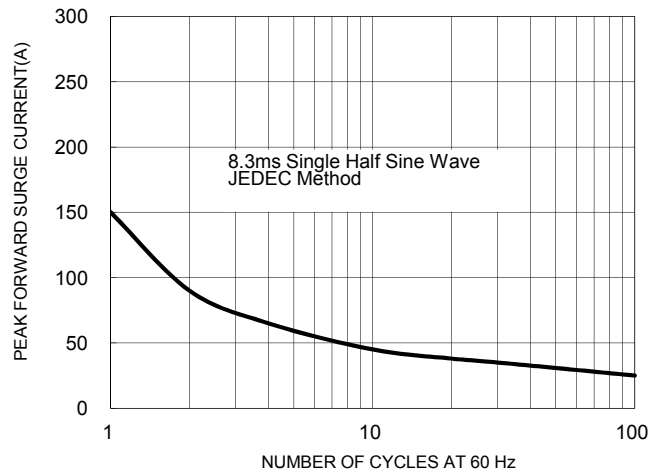


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

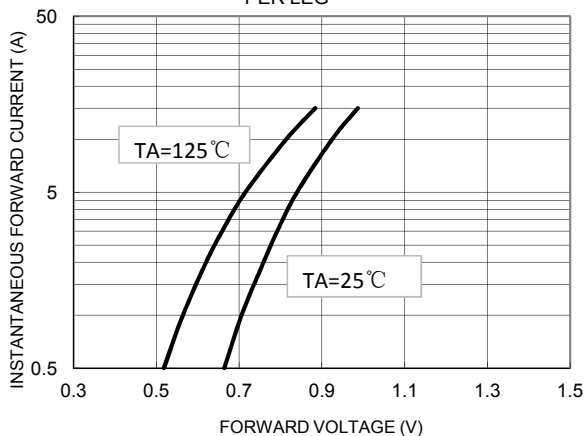
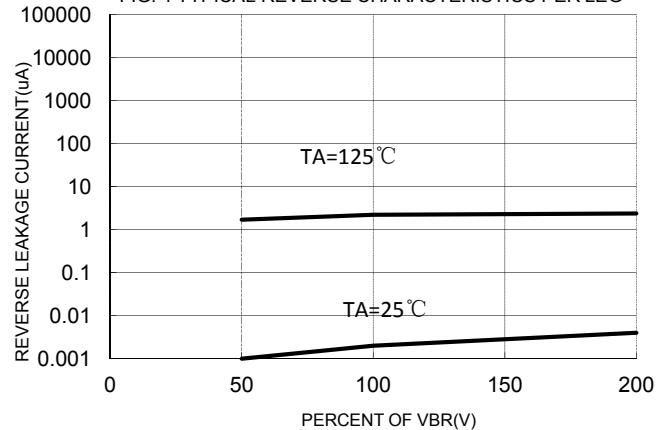
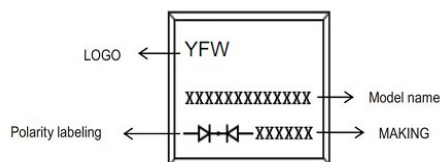


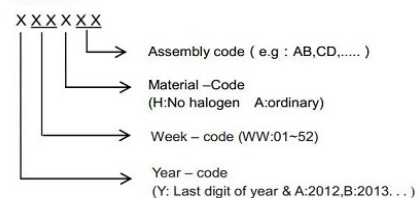
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



MAKING:



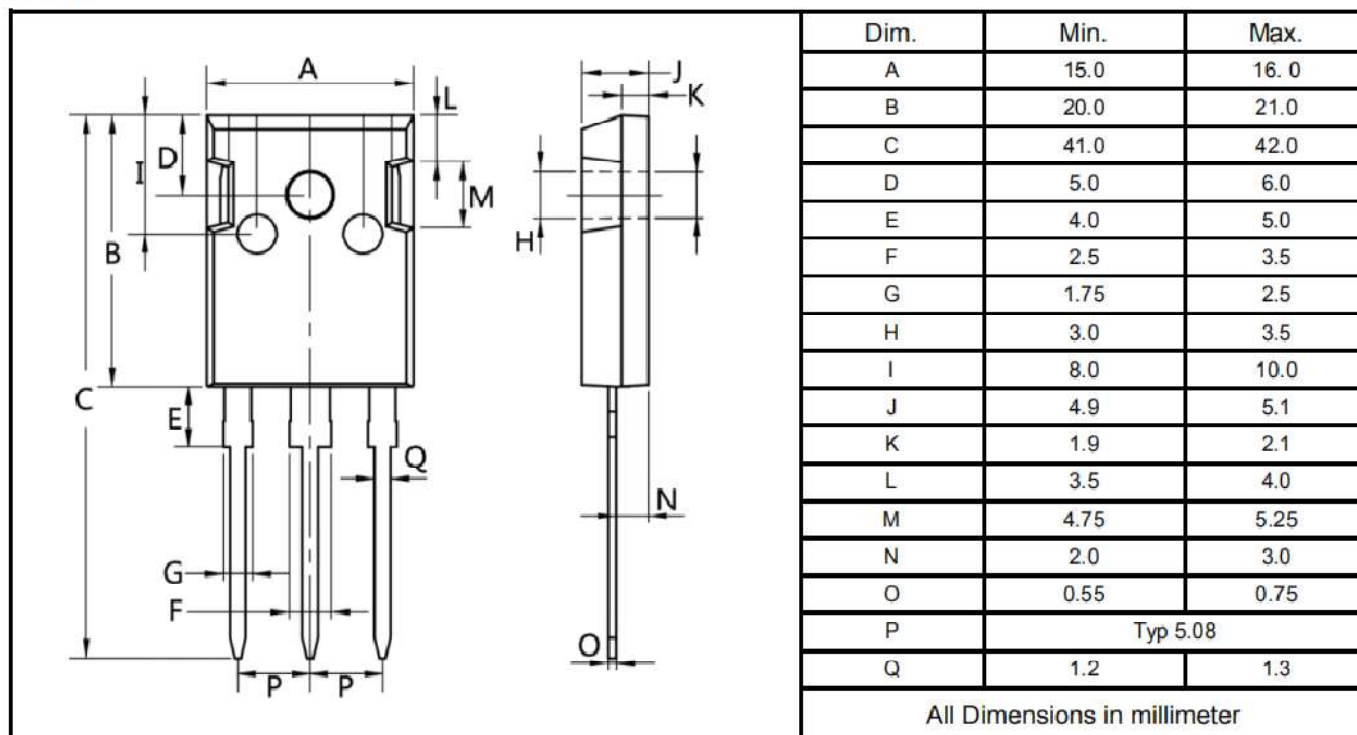
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR3020PT	TO-247	0.209oz(5.93g)	30 pcs / tube	600pcs/box 2400pcs/carton
MUR3020PTS	TO-247S	0.158oz(4.48g)	30 pcs / tube	600pcs/box 2400pcs/carton

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

Package Outline Dimensions millimeters

TO-247



TO-247S

