

ULTRAFST RECOVERY RECTIFIERS

Reverse Voltage - 400 V

Forward Current - 60 A

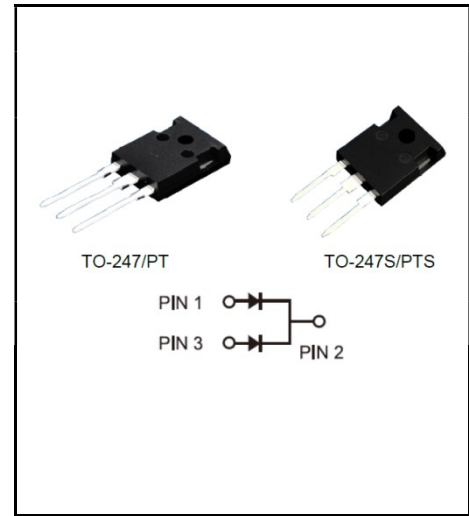


FEATURES

- ◆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*30A
$V_{RRM}$	400V
$I_{FSM}$	480A
$V_F$	1.20V
$T_J$ Max	150°C

Maximum Ratings (Per Leg) at  $T_a=25^\circ\text{C}$  unless otherwise specified

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	400	V
Maximum RMS voltage	$V_{RMS}$	400	V
Maximum DC Blocking Voltage	$V_{DC}$	400	V
Maximum Average Forward Rectified Current	Per Leg	30	A
	Total	60	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	$I_{FSM}$	480	A
Operating Temperature Range	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-40 ~ +150	°C
Typical Thermal Resistance (Note1) TO-247/PT TO-247/PTS	$R_{\theta JA}$ $R_{\theta JC}$	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	
		Typ	Max		
Forward Voltage Drop(Note2) at $I_F=5A$ at $I_F=10A$ at $I_F=30A$	$V_F$	TA=25°C	0.91	-	V
		TA=125°C	0.71	-	
		TA=25°C	1.02	-	
		TA=125°C	0.82	-	
		TA=25°C	1.20	1.40	
		TA=125°C	1.06	-	
Maximum Reverse Current at $V_R=400V$	$I_R$	TA=25°C	0.03	1	uA
		TA=125°C	15	-	uA
Maximum Reverse Recovery Time at $I_F=0.5A$ , $I_R=1A$ , $IRR=0.25A$	$T_{RR}$	-	-	50	nS

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

**RATINGS AND CHARACTERISTIC CURVES**

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

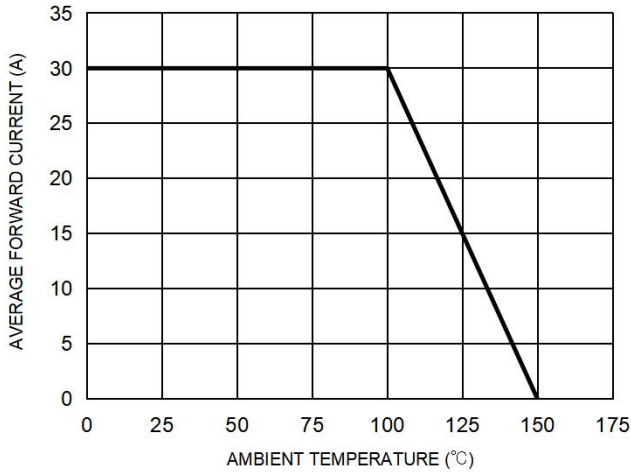


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

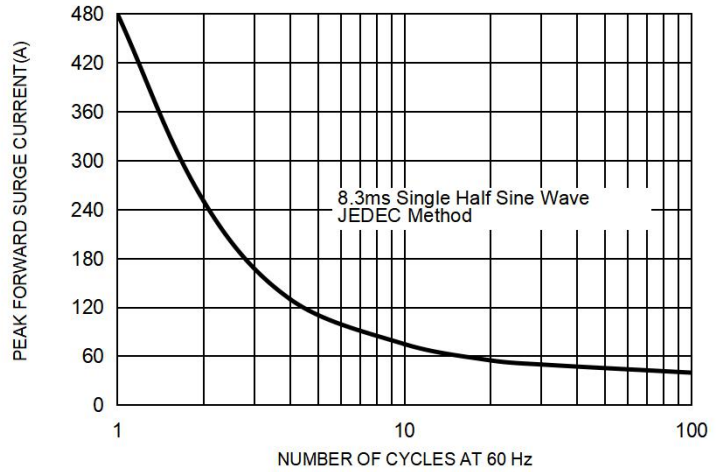


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

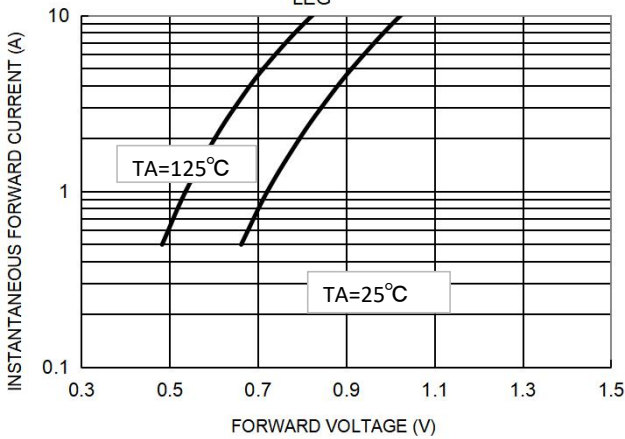
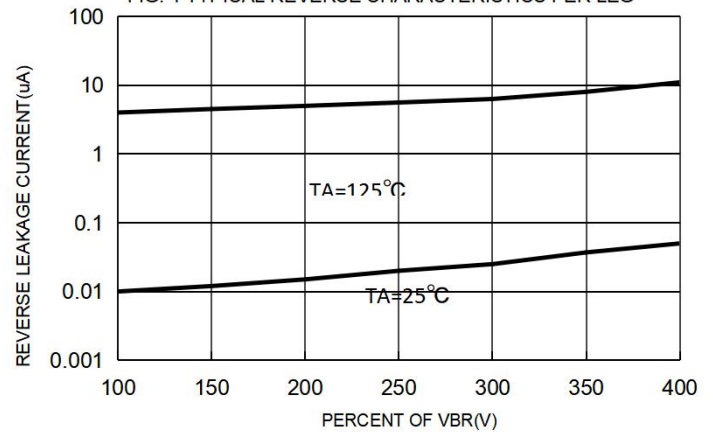
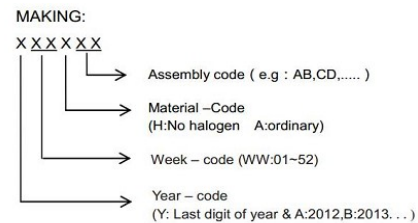
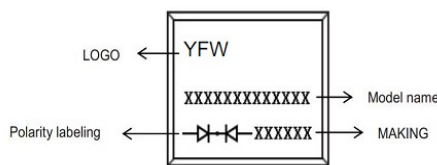


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



**Marking on the body**



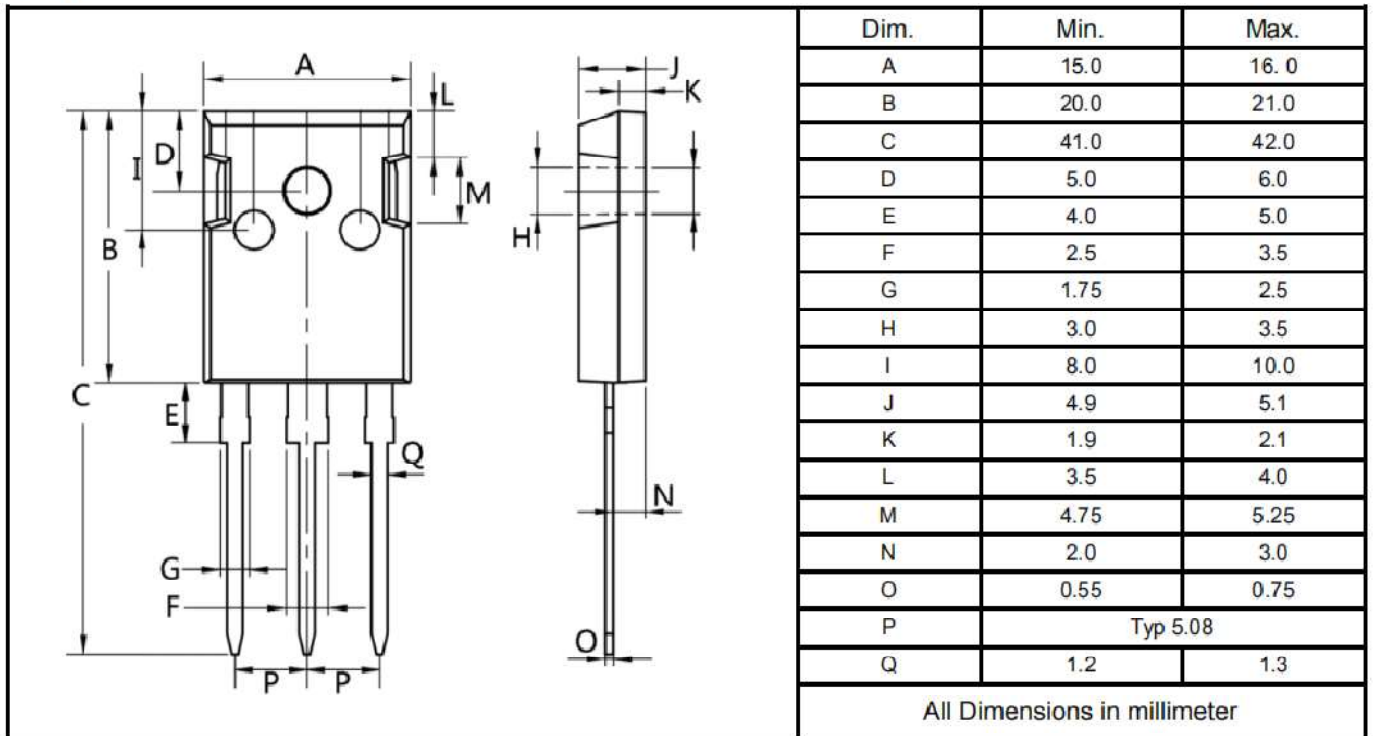
**Ordering information**

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR6040PT	TO-247	0.209oz(5.93g)	30 pcs / tube	600pcs/box 2400pcs/carton
MUR6040PTS	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**

