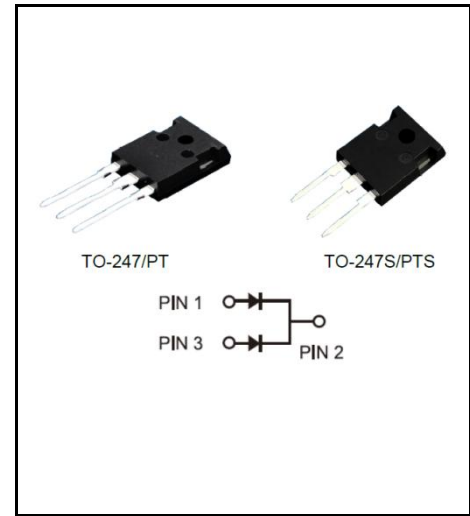


ULTRAFST RECOVERY RECTIFIERS
Reverse Voltage - 400 V
Forward Current - 50 A
FEATURES

- ◆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*25A
V_{RRM}	400V
I_{FSM}	420A
V_F	1.00V
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	25	A
	Total	50	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	I_{FSM}	420	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_{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
		Typ	Max	
Forward Voltage Drop(Note2)	V_F	0.88	-	V
at IF=5A				
		TA=125°C		
at IF=10A		TA=25°C		
		TA=125°C		
at IF=25A		TA=25°C	1.20	
	TA=125°C	1.00	-	
Maximum Reverse Current at V _R =400V	I_R	0.1	1	uA
		10	-	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

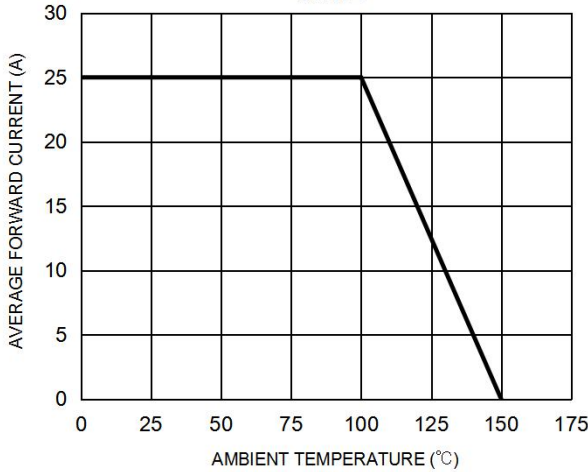


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

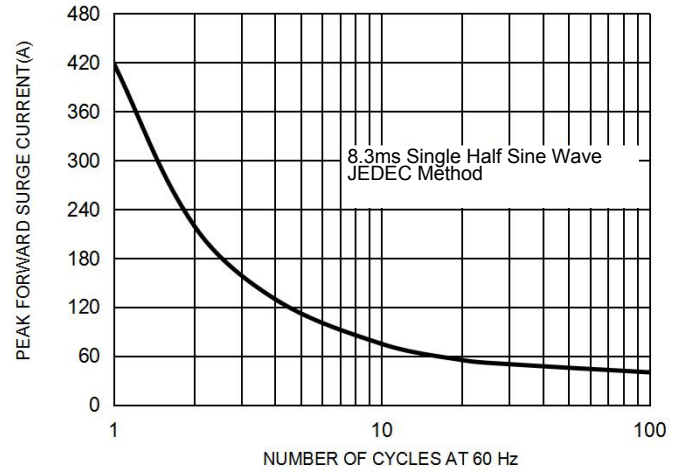


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

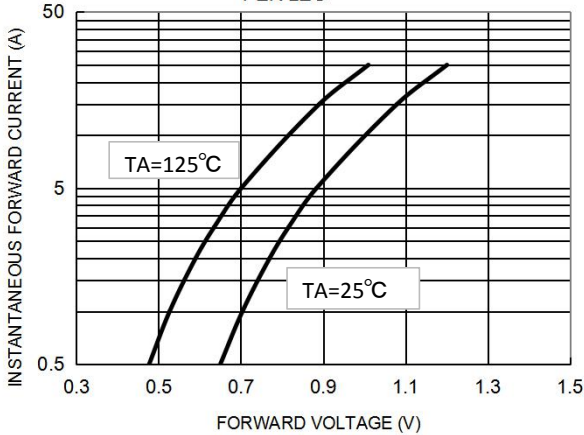
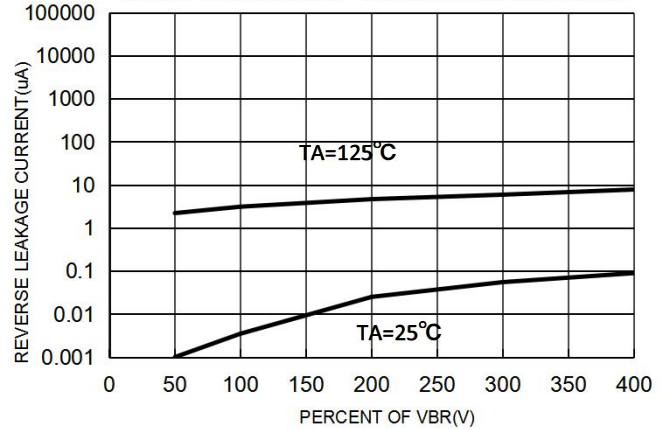
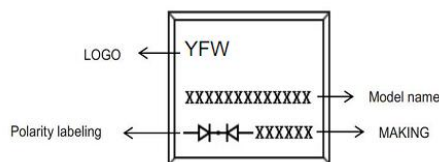


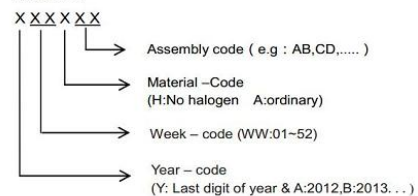
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



MAKING:



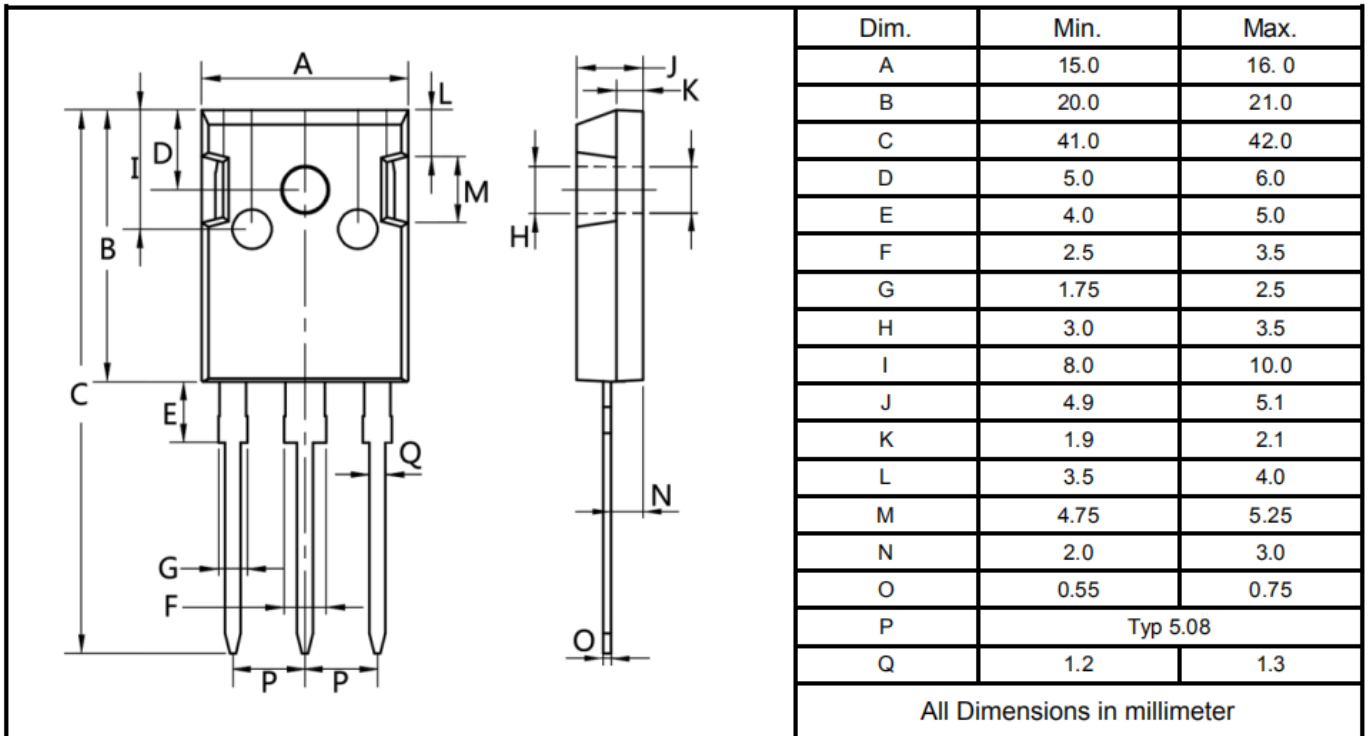
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR5040PT	TO-247	0.209oz(5.93g)	30 pcs / tube	600pcs/box 2400pcs/carton
MUR5040PTS	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

