

ULTRAFAST RECOVERY RECTIFIERS
Reverse Voltage - 300 V
Forward Current - 40 A
FEATURES

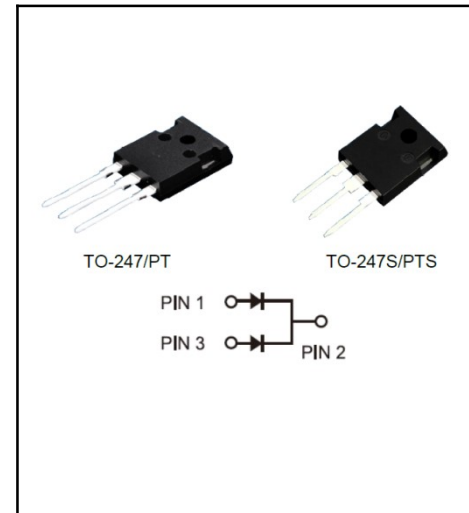
- ◆ High speed switching capability
- ◆ High current capability
- ◆ High forward surge capability
- ◆ Low power losses, High efficiency
- ◆ High reliability
- ◆ For use in low voltage, high frequency inverters

MECHANICAL DATA

- ◆ Case: Molded plastic
- ◆ Polarity: As marked
- ◆ Mounting Position: Any
- ◆ Molded Plastic: UL Flammability Classification Rating 94V-0
- ◆ Lead free in compliance with EU RoHS 2011/65/EU directive
- ◆ Solder bath temperature 275°C maximum, 10s per JESD 22-B106

Primary Characteristic

I_o	2*20A
V_{RRM}	300V
I_{FSM}	200A
V_F	1.0V
T_J Max	175°C


Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Characteristics		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	300	V
Working Peak Reverse Voltage		V _{RWM}	210	V
Maximum DC Blocking Voltage		V _{DC}	300	V
Maximum Average Forward Rectified Current	Per Leg	I _o	20	A
	Total		40	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I _{FSM}	200	A
Operating Temperature Range		T _J	175	°C
Storage Temperature Range		T _{STG}	-40 to +175	°C
Typical Thermal Resistance (Note1)		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		Symbol	Value		Unit
Forward Voltage Drop (Note2)		V _F	Typ.	Max.	V
at I _F =10A	TA=25°C		0.85	-	
	TA=125°C		0.67	-	
at I _F =20A	TA=25°C		0.92	0.96	
	TA=125°C		0.75	-	
Maximum Reverse Current at V _R =300V	TA=25°C		I _R	0.2	
	TA=125°C	I _R	15	-	μA
Maximum Reverse Recovery Time at I _F =0.5A, I _R =1A,		T _{rr}	-	45	ns

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

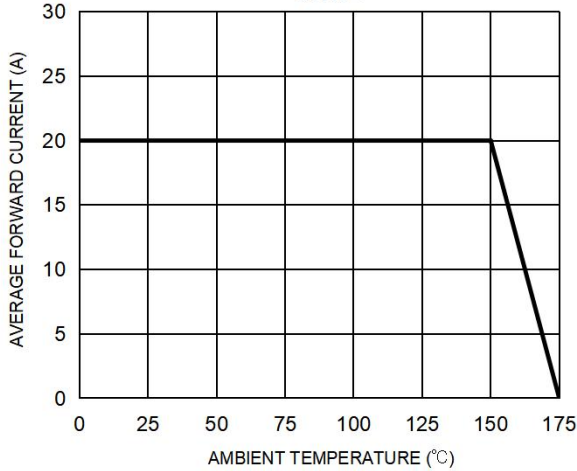


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

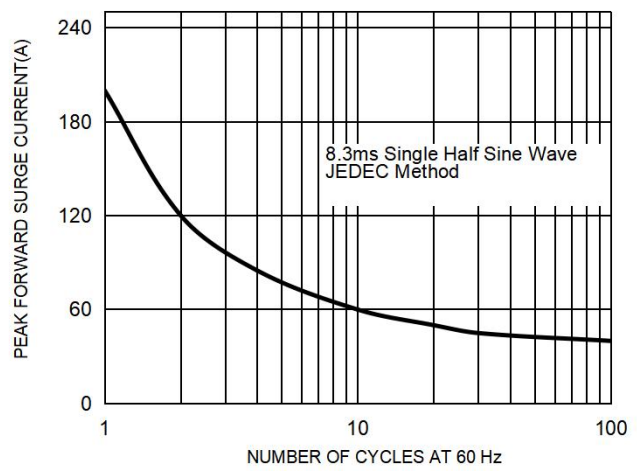


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

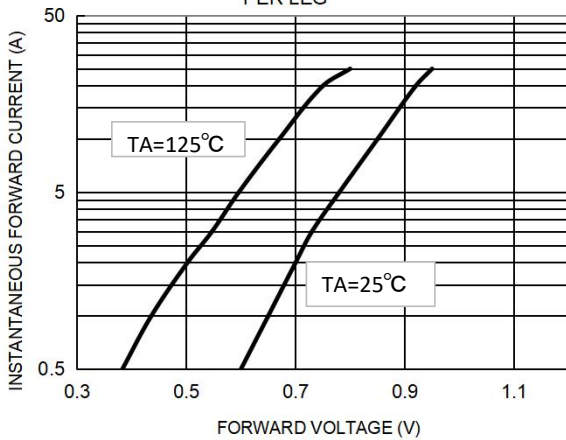
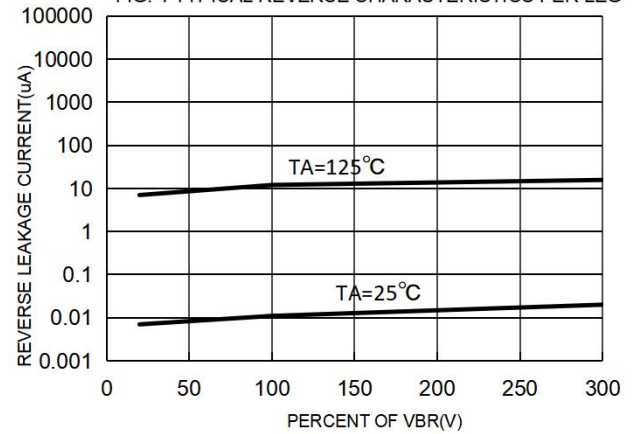
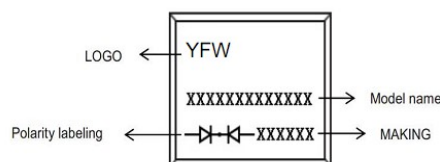


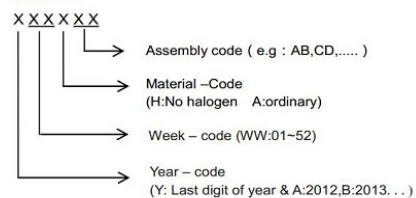
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



MAKING:



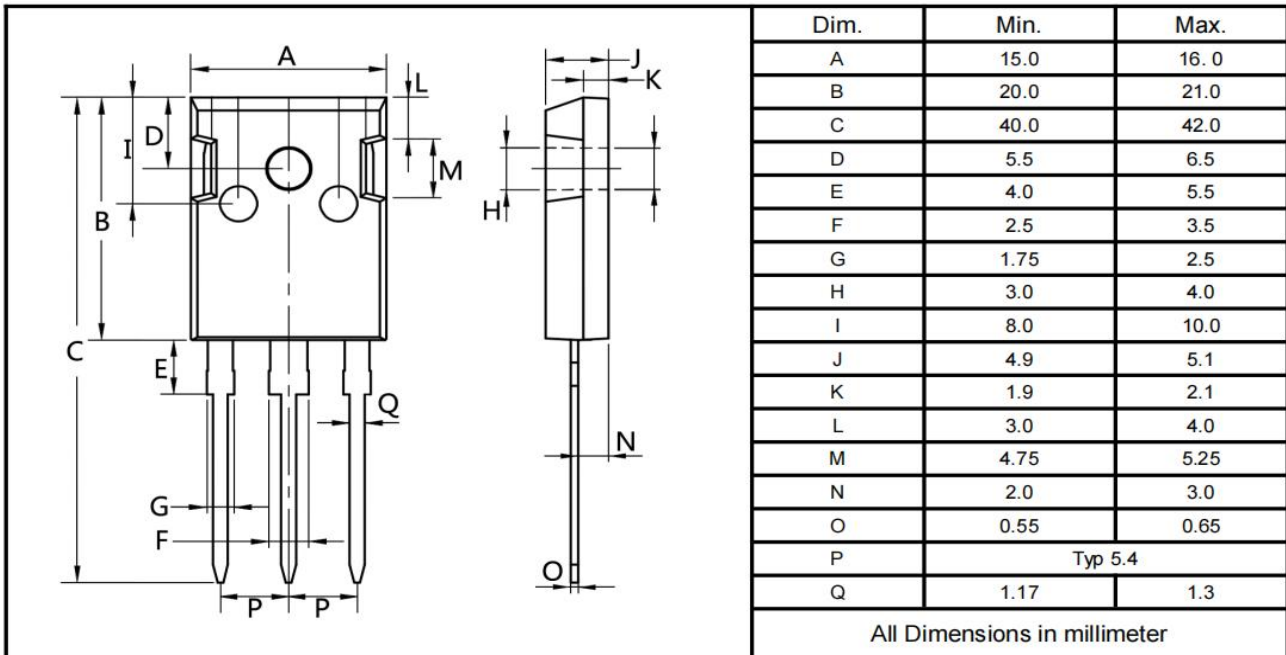
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR4030PT	TO-247	0.209oz(5.93g)	30 pcs / tube	600pcs/box 3000pcs/carton
MUR4030PTS	TO-247S	0.158oz(4.48g)	30 pcs / tube	600pcs/box 3000pcs/carton

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

Package Outline Dimensions millimeters

TO-247



TO-247S

