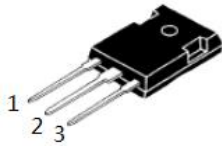
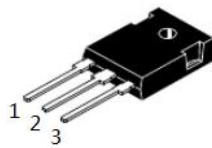




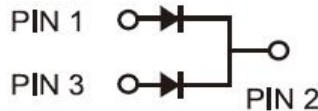
ULTRAFAST RECOVERY RECTIFIERS



TO-247/PT



TO-247S/PTS



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



APPLICATIONS

Fast recovery diode, mainly used for rectification, used in high-power equipment, The express and ultrafast recovery diodes are suitable for high frequency and ultra high frequency circuits, respectively

Primary Characteristic

I_O	2*15A
V_{RRM}	1200V
I_{FSM}	160A
V_F	1.49V
T_{jmax}	175°C

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

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

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1200	V
Working Peak Reverse Voltage	V_{RWM}	1200	V
Maximum DC Blocking Voltage	V_{DC}	1200	V
Maximum Average Forward Rectified Current	Per Leg Total	I_O	A
		15 30	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	160	A
Operating Temperature Range	T_J	175	°C
Storage Temperature Range	T_{STG}	-55 to +175	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	2	°C/W

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)		V _F	Typ.	Max.	V
at I _F =5A	TA=25°C		1.40	-	
	TA=125°C		1.10	-	
at I _F =10A	TA=25°C		1.61	-	
	TA=125°C		1.33	-	
at I _F =15A	TA=25°C		1.76	2.30	
	TA=125°C		1.49	-	
Maximum Reverse Current at V _R =1200V	TA=25°C		I _R	0.1	
	TA=125°C		8	-	μA
Maximum Reverse Recovery Time at I _F =0.5A, I _R =1A,		T _{rr}	-	65	ns

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



RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

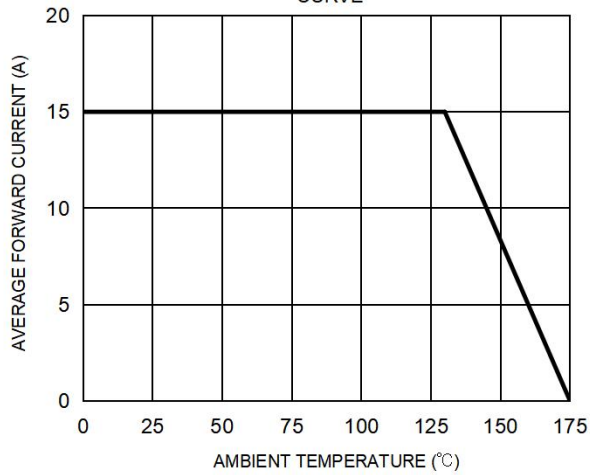


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

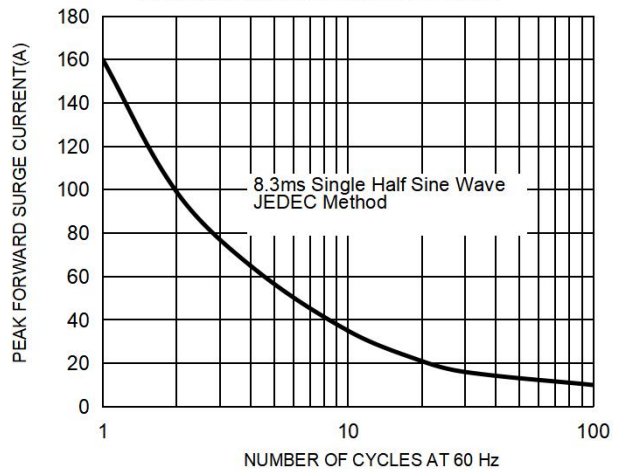


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

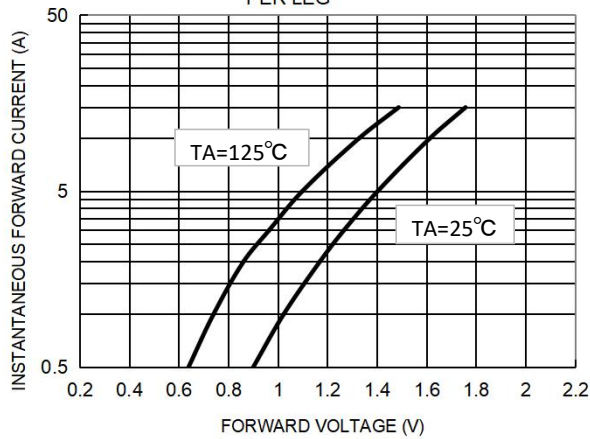
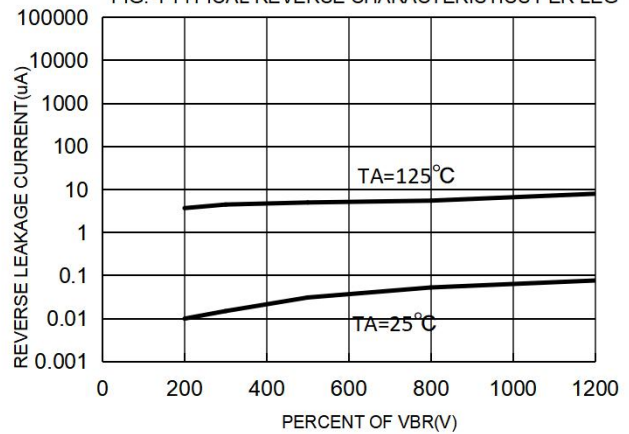


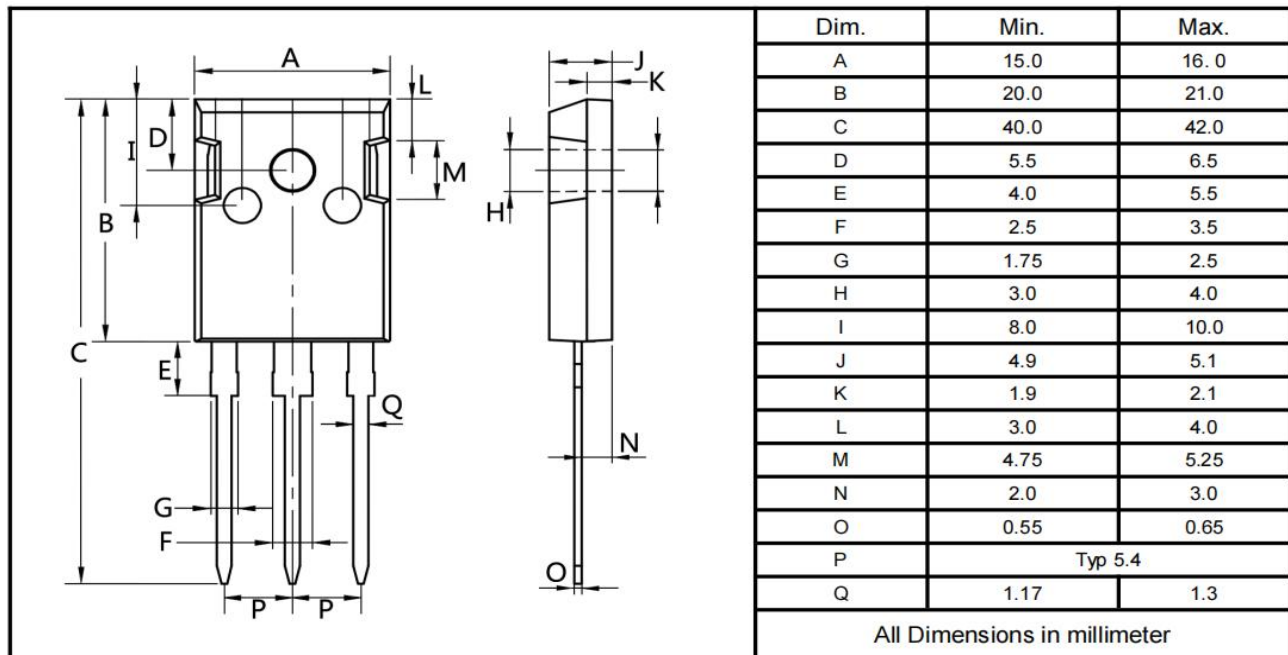
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



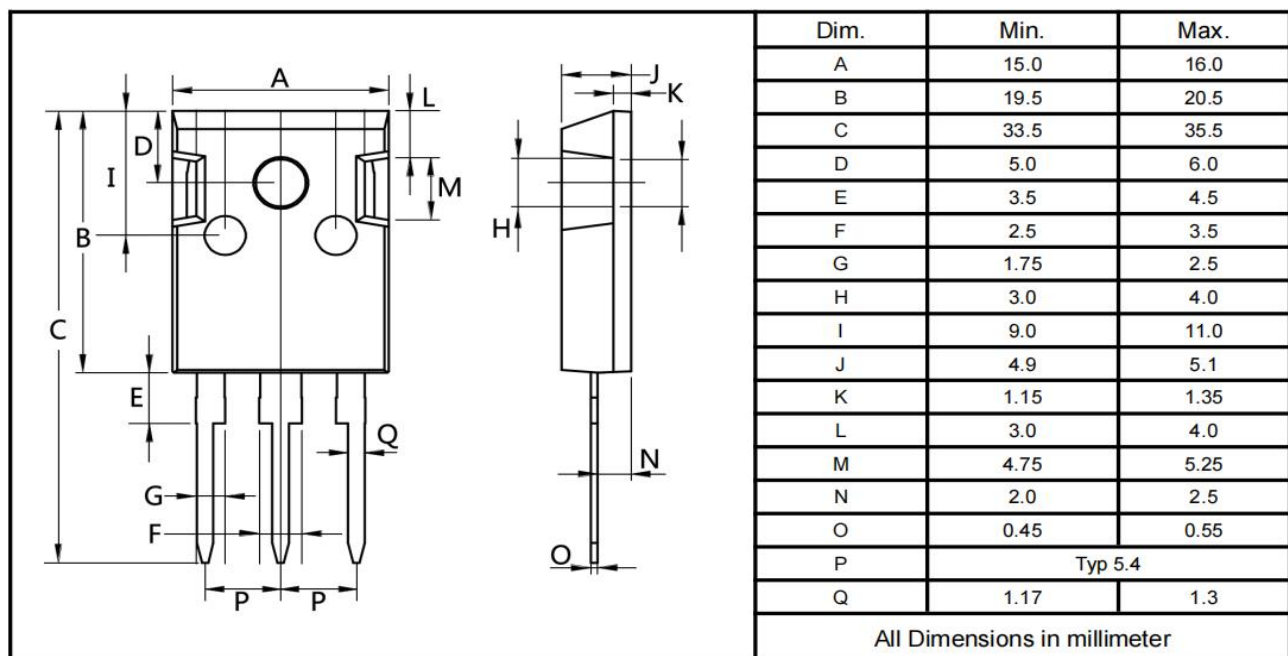


Package Outline Dimensions millimeters

TO-247



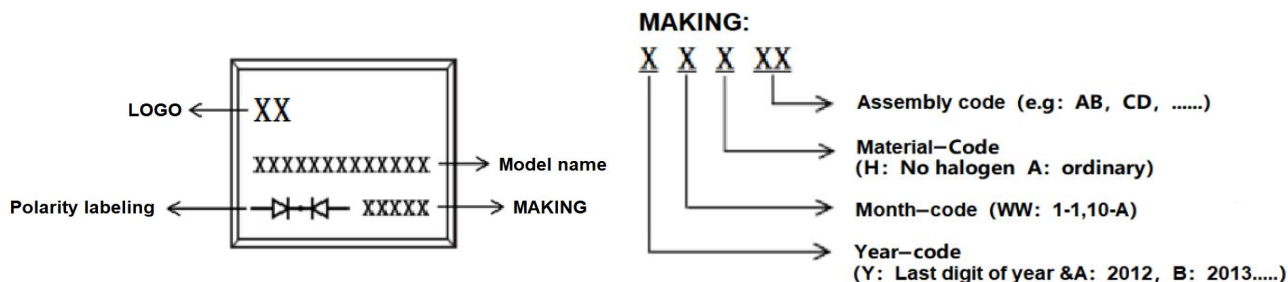
TO-247S





MUR30120PT/PTS

Marking on the body

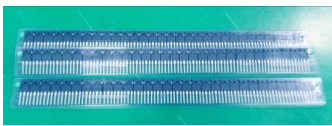


Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR30120PT	TO-247	0.209oz(5.93g)	30 pcs / tube	600pcs/box 3000pcs/carton
MUR30120PTS	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.

packing instruction

PKG	最小包装	内盒	外箱
TO-247 TO-247S	 30PCS/管	 600pcs/盒	 3000pcs/箱

Notice

1. All product, product specifications and data are subject to change without notice to improve. The right to explain is owned by LINGXUN electronics company.
2. Confirm that operation temperature is within the specified range described in the product specification. Avoid applying power exceeding normal rated power;
exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.
3. LINGXUN electronics shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.