

# MUR30xxPT Series



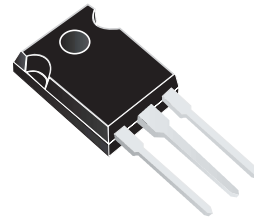
## Super Fast Recovery Rectifiers

Reverse Voltage: 200 to 600 Volts

Forward Current: 30.0 Ampere

RoHS Device

Halogen Free

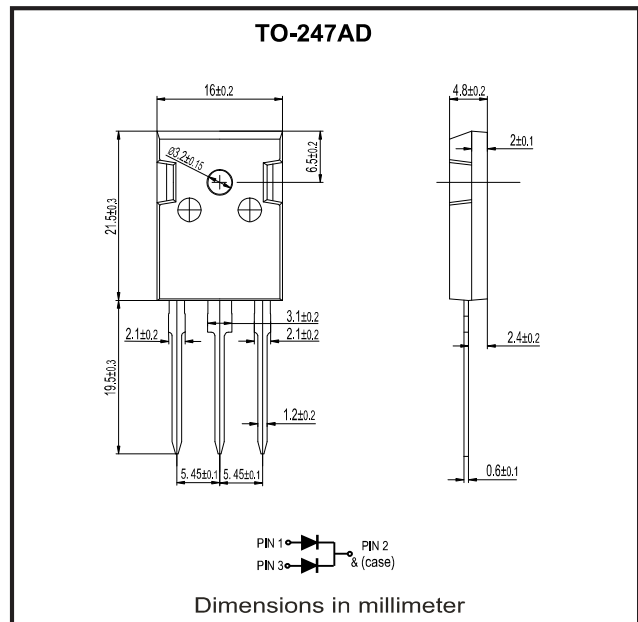


### Features

- Glass passivated chip junctions
- High Speed recovery time for switching mode application
- High Forward Surge Capability
- Low Reverse Current
- Lead free in compliance with EU RoHS 2011/65/EU directive

### Mechanical data

- Leads: Solderable per mil-std-202, Method 208
- Polarity: as marked
- Mounting torque: 5 in-lbs maximum
- Terminals: Puretin plated
- Weight: 5.85 grams



### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20%

Parameter	Symbols	MUR3020PT	MUR3040PT	MUR3060PT	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	V
Maximum RMS voltage	$V_{RMS}$	140	280	420	V
Maximum DC blocking voltage	$V_{DC}$	200	400	600	V
Average forward current per device per diode	$I_{F(AV)}$	30 15			A
Max. forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	250			A
Max. forward voltage at 15A	$V_F$	1.05	1.35	1.85	V
Maximum DC reverse current at rated DC blocking voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	$I_R$	5 250			$\mu\text{A}$
Maximum reverse recovery time (Note 1)	$t_{rr}$	35			ns
Typical thermal resistance (Note 2)	$R_{\theta JC}$	1.5			$^\circ\text{C/W}$
Operating Junction temperature range	$T_j$	$-55 \sim +150$			$^\circ\text{C}$
Storage temperature range	$T_{stg}$	$-55 \sim +150$			$^\circ\text{C}$

Notes: 1. Measured with  $I_F = 0.5\text{A}$ ,  $I_R = 1\text{A}$ ,  $t_{rr} = 0.25\text{A}$ .

2. P.C.B. mounted with 2.0" x 2.0" (5 x 5 cm) copper pad areas.

Company reserves the right to improve product design , functions and reliability without notice.

Rev:1.0

## Rating and Characteristic Curves

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

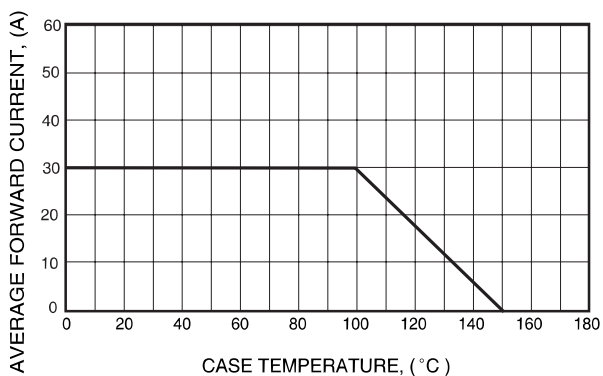


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

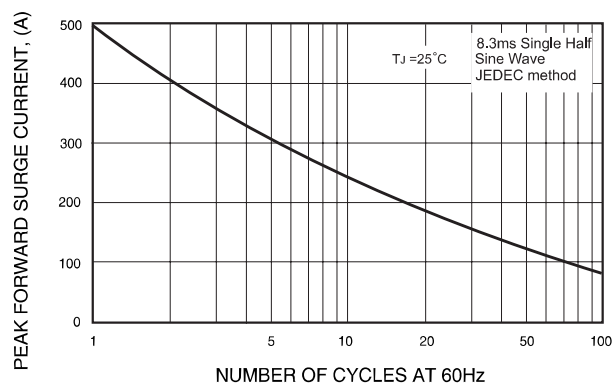


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

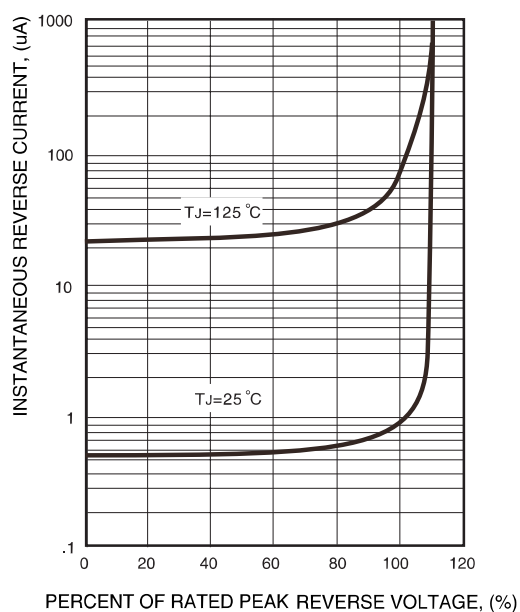
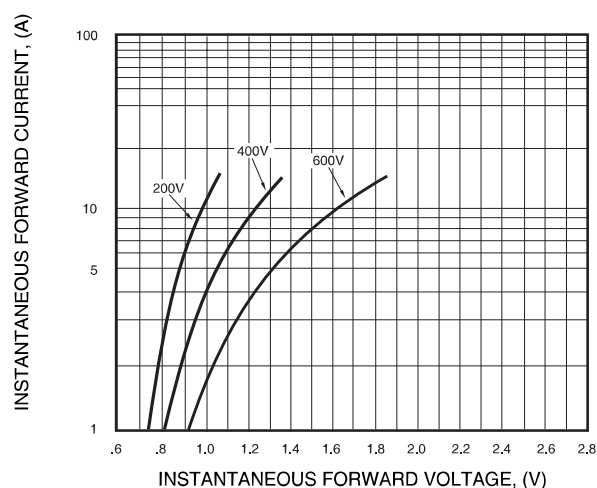
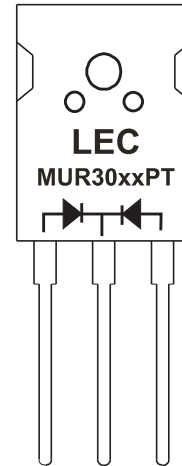


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



## Marking Code

Part Number	Marking Code
MUR30xxPT Series	MUR30xxPT



LEC = Longmacro Logo  
xx = Product type marking code

## Standard Packaging

Case Type	TUBE PACK	
	TUBE ( pcs )	BOX ( pcs )
TO-247	25	500