

### General Description

MUR6060PT Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

### Features

- Common Cathode
- Super fast switching for high efficiency.
- High forward surge current capability
- RoHS Compliant

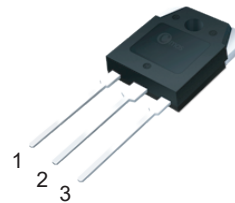
### Product Summary

V <sub>RRM</sub>	V <sub>F</sub>	I <sub>F(AV)</sub>
600V	1.6V	60A

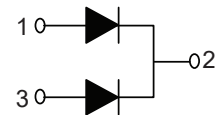
### Applications

- Welder
- Switched Mode Power Supplies (SMPS)
- Uninterruptible Power Supply

### TO-3P Pin Configuration



TO-3P  
MUR6060PT



- 1. Anode
- 2. Common Cathode
- 3. Anode

### Absolute Maximum Ratings

Symbol	Parameter	Rating	Units
V <sub>RRM</sub>	Peak Repetitive Reverse Voltage	600	V
I <sub>F(AV)</sub>	Average Rectified Forward Current (Rated VR-20KHz Square Wave) - 50% duty cycle	30 (Per Leg) 60 (Total)	A
T <sub>RR</sub>	Reverse Recovery Time(I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, I <sub>REC</sub> =0.25A)	≤50	nS
I <sub>FSM</sub>	Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load per Leg	200	A
T <sub>J</sub>	Operating Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-40 to 150	°C

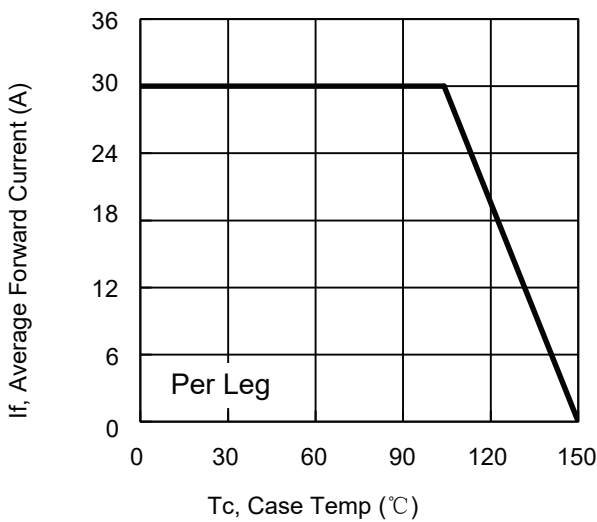
### Thermal Data

Symbol	Parameter	Typ.	Max.	Unit
R <sub>θJC</sub>	Thermal Resistance, Junction to Case(Per Leg)	---	2	°C/W

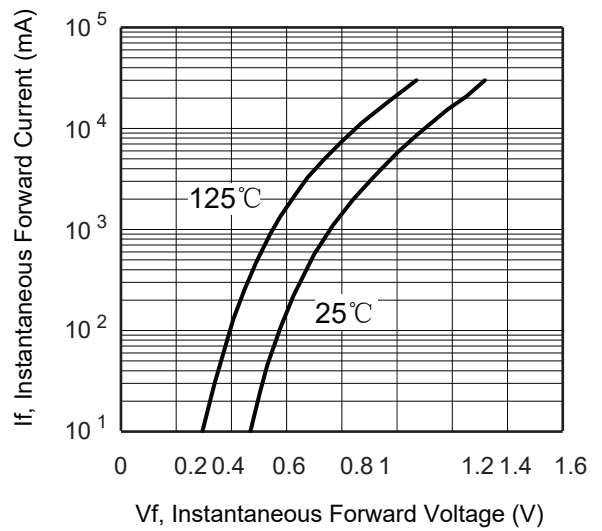
Electrical Characteristics

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
$V_F$	Forward Voltage Drop per diode	$I_F=30A(I_{FAV}=30A \times 2)$ , $T_C=25^\circ C$	---	1.32	1.6	V
		$I_F=30A(I_{FAV}=30A \times 2)$ , $T_C=125^\circ C$	---	---	1.25	
$I_R$	Reverse Leakage Current per diode	$V_R=600V$ , $T_C=25^\circ C$	---	---	0.01	mA
		$V_R=600V$ , $T_C=125^\circ C$	---	---	0.1	

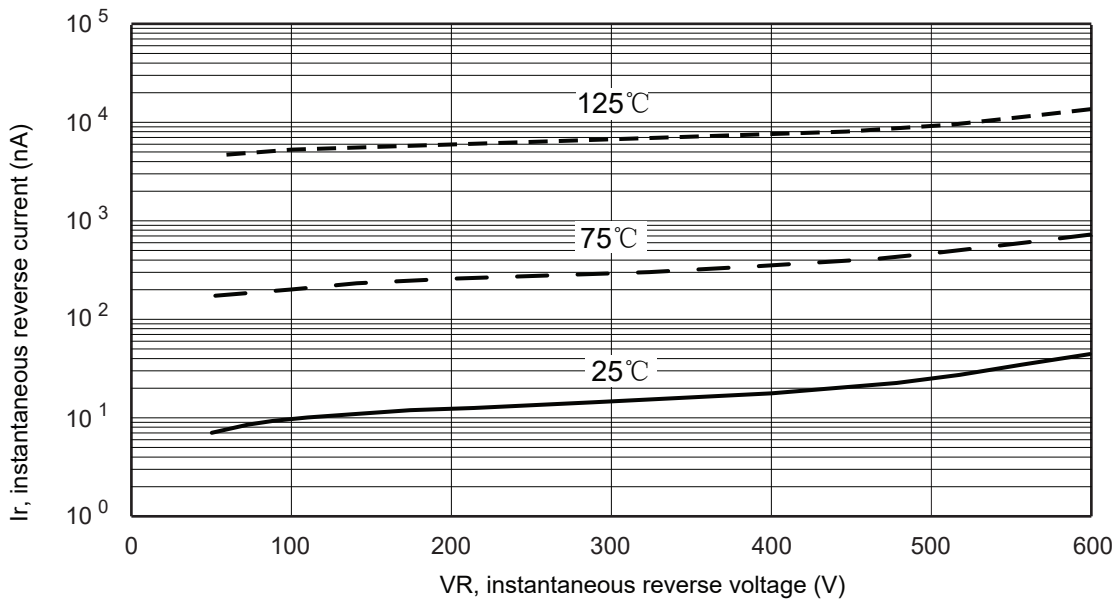
Typical Performance Characteristics



Forward Current Derating Curve



Forward Characteristics



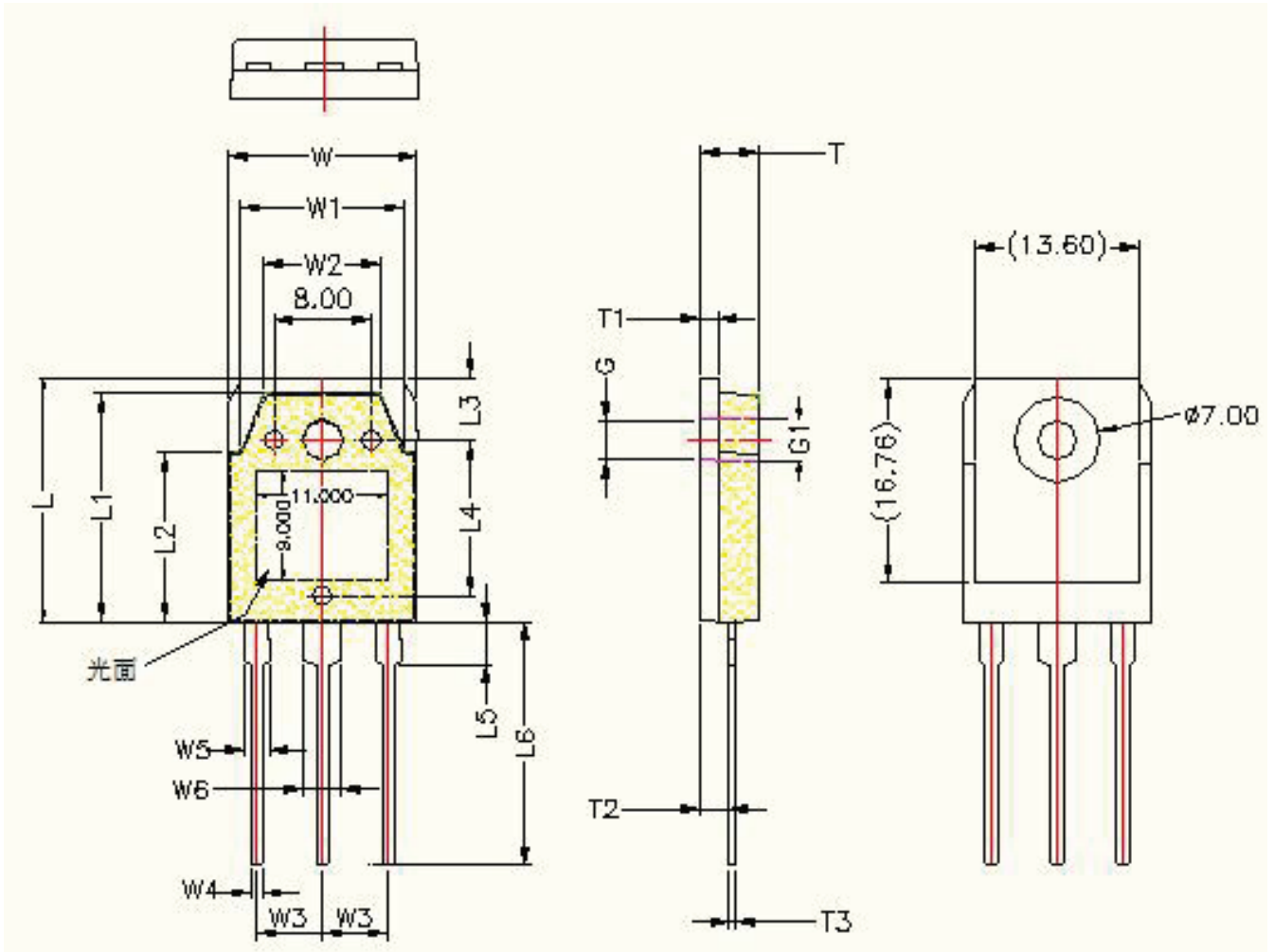
Reverse Characteristics

This product has been designed and qualified for the consumer market.  
 Cmos assumes no liability for customers' product design or applications.  
 Cmos reserves the right to improve product design, functions and reliability without notice. Please refer to the latest version of specification.

Package Dimension

TO-3P

Unit :mm



Symbol	Dimensions	Symbol	Dimensions	Symbol	Dimensions
W	15.60±0.3	L	19.90±0.3	T	4.80±0.3
W1	13.60±0.3	L1	18.70±0.3	T1	1.50±0.3
W2	9.60±0.3	L2	13.90±0.3	T2	2.40±0.3
W3	5.45(TYP)	L3	5.00±0.3	T3	0.60±0.3
W4	1.00±0.3	L4	12.76±0.3	G	Ø3.25±0.3
W5	2.10±0.2	L5	3.50±0.3	G1	Ø3.58±0.3
W6	3.10±0.2	L6	20.00±0.3		