



DESCRIPTION

The MUR3060 and MUR3060S are available in TO-247 and TO-247S Packages.

MECHANICAL DATA

- Case: TO-247, TO-247S
- Solder Bath Temperature 275°C Maximum, 10s per JESD22-106

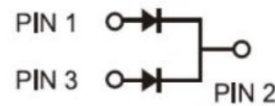
ORDERING INFORMATION

Package Type	Part Number
TO-247	MUR3060
TO-247S	MUR3060S
Note	SPQ: 30pcs/Tube
AiT provides all RoHS Compliant Products	

FEATURE

- High Speed Switching Capability
- High Current Capability
- High Forward Surge Capability
- Low Power Losses , High Efficiency
- For Use in Low Voltage, High Frequency Inverters

PIN DESCRIPTION



Pin #	1	2	3
Symbol	CATHODE	ANODE	

ABSOLUTE MAXIMUM RATINGS

T_A = 25°C, unless otherwise specified

V _{RRM} , Maximum Repetitive Peak Reverse Voltage		600V
V _{RMS} , Maximum RMS Voltage		420V
V _{DC} , Maximum DC Blocking Voltage		600V
I _O , Maximum Average Forward Rectified Current at T _C =120°C	Per Leg	15A
	Total	30A
I _{FSM} , Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load		250A
T _J , Operating Junction Temperature Range		150°C
T _{STG} , Storage Temperature Range		-40°C ~ + 150°C
R _{θJC} , Typical Thermal Resistance		2°C/W
R _{θJA} , Typical Thermal Resistance		2°C/W

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.



ELECTRICAL CHARACTERISTICS

$T_A = 25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions		Typ.	Max.	Unit
Forward Voltage Drop	V_F	IF=3A	$T_A=25^\circ\text{C}$	0.92	-	V
			$T_A=125^\circ\text{C}$	0.73	-	
		IF=5A	$T_A=25^\circ\text{C}$	0.99	-	
			$T_A=125^\circ\text{C}$	0.80	-	
		IF=15A	$T_A=25^\circ\text{C}$	1.20	1.59	
			$T_A=125^\circ\text{C}$	1	-	
Maximum Reverse Current	I_R	$V_R=600$	$T_A=25^\circ\text{C}$	0.03	1	μA
			$T_A=125^\circ\text{C}$	11	-	
Maximum Reverse Recovery Time at	T_{RR}	IF=0.5A, IR=1A, IRR=0.25A		-	50-	nS

TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Maximum Forward Current Derating Curve

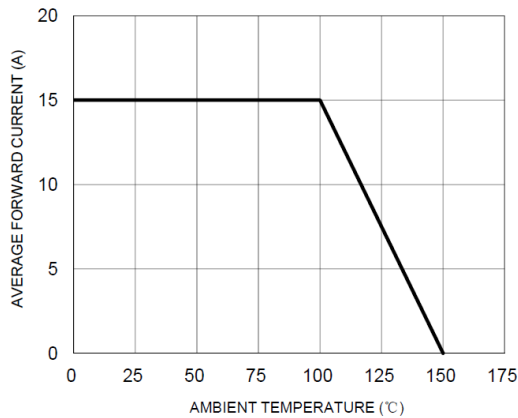


Fig 2. Maximum Non-Repetitive Peak Forward Surge Current Per leg

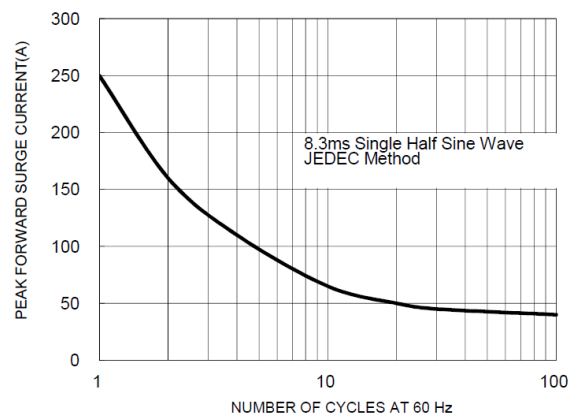


Fig 3. Typical Forward Characteristics Per Leg

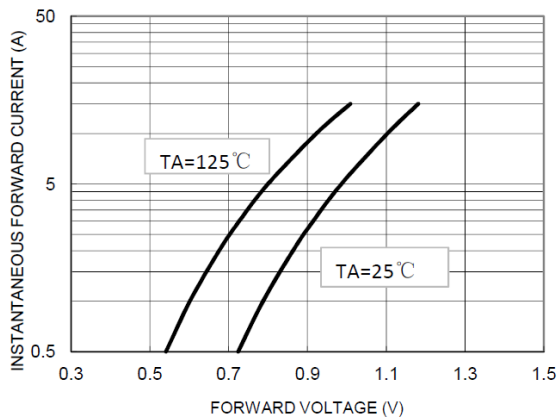
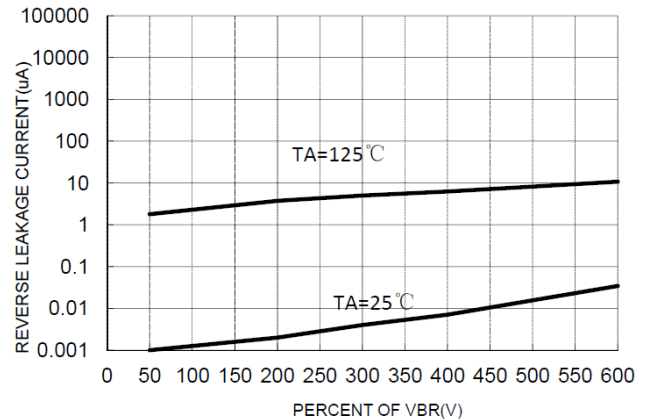


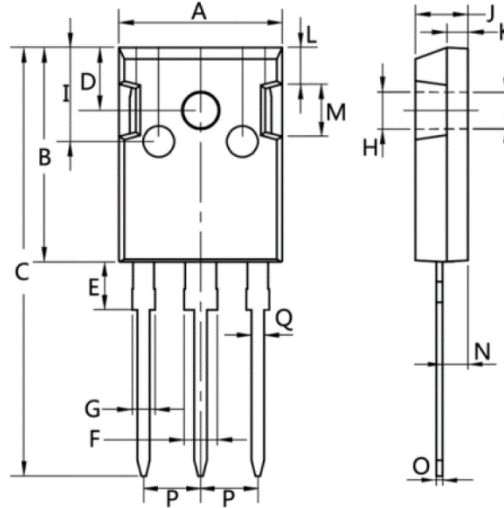
Fig 4. Typical Reverse Characteristics Per Leg





PACKAGE INFORMATION

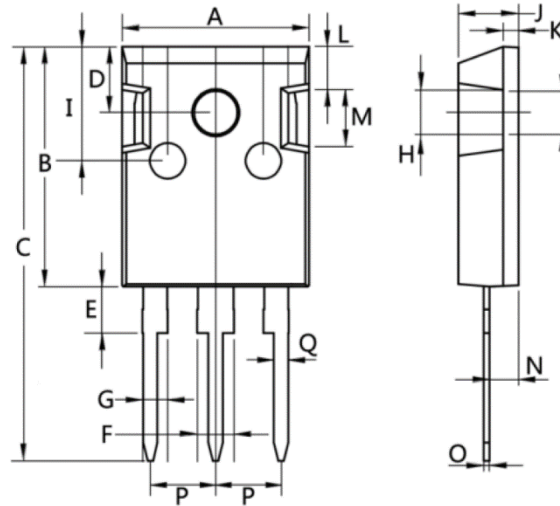
Dimension in TO-247 Package



Symbol	Millimeters (mm)	
	Min.	Max.
A	15.000	16.000
B	20.000	21.000
C	41.000	42.000
D	5.000	6.000
E	4.000	5.000
F	2.500	3.500
G	1.750	2.500
H	3.000	3.500
I	8.000	10.000
J	4.900	5.100
K	1.900	2.100
L	3.500	4.000
M	4.750	5.250
N	2.000	3.000
O	0.550	0.750
P	5.080 TYP.	
Q	1.200	1.300



Dimension in TO-247S-3 Package



Symbol	Millimeters (mm)	
	Min.	Max.
A	15.000	16.000
B	20.000	21.000
C	41.000	42.000
D	5.000	6.000
E	4.000	5.000
F	2.500	3.500
G	1.750	2.500
H	3.000	3.500
I	8.000	10.000
J	4.900	5.100
K	1.900	2.100
L	3.500	4.000
M	4.750	5.250
N	2.000	3.000
O	0.550	0.750
P	5.080 TYP.	
Q	1.200	1.300



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