

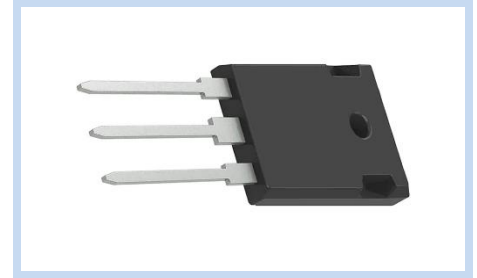
Fast Recovery Rectifier 30A TO-247

MUR30-T247

MERITEK

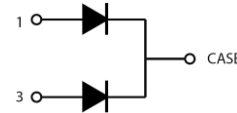
FEATURES

- High Frequency Operation
- High Surge Forward Current Capability
- Guard Ring for Enhanced Ruggedness and Long-Term Reliability
- High Purity, High Temperature Epoxy Encapsulation for Enhanced Mechanical Strength and Moisture Resistance



MECHANICAL DATA

- Case: TO-247, Molded Plastic
- Terminals: Solderable per MIL-STD-202 Method 208



MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

Parameter	Symbol	MUR3020 T247	MUR3040 T247	MUR3060 T247	Units
Maximum Recurrent 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
Maximum Forward Voltage at $I_F=15A$	Per Leg V_F	1.0	1.3	1.6	V_F
Average Forward Rectified Current	Per Leg	15			A
	Per Device	30			
Peak Forward Surge Current, 8.3ms Single Half-Sine-Wave (JEDEC Method)	Per Leg I_{FSM}	200			A
Maximum Thermal Resistance	Per Leg $R_{\theta JC}$	4.0			$^{\circ}C/W$
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^{\circ}C$, Per Leg	10			μA
	$T_A=125^{\circ}C$, Per Leg	500			
Maximum Reverse Recovery Time	Per Leg T_{RR}	35			ns
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150			$^{\circ}C$

Notes:

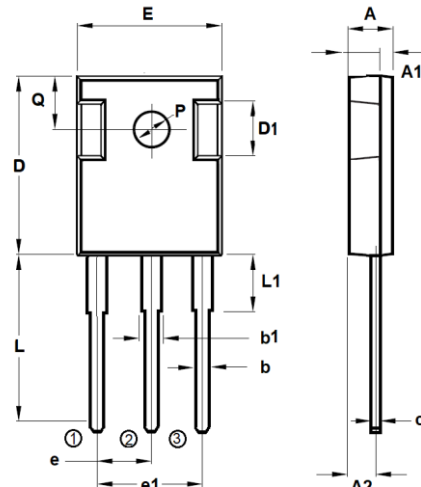
1. $T_A=25^{\circ}C$ unless otherwise noted

2. Reverse recovery time test condition, $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

DIMENSIONS

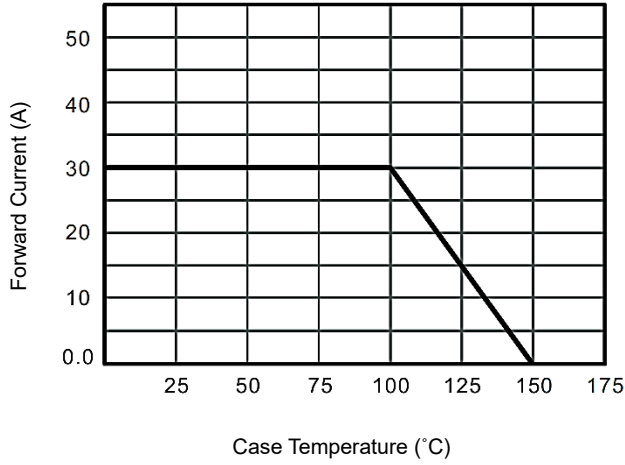
Item	Min (mm)	Max (mm)
A	4.80	5.25
A2	2.29	2.49
b	1.08	1.38
b1	2.95	3.25
b2	1.90	2.20
c	0.50	0.70
D	18.45	22.55
E	14.18	17.33
e	4.91	6.01
L	18.27	22.33
L1	4.05	4.25
P	3.15	3.85

Notes: Pin 1&3: Anode; Pin 2: Cathode

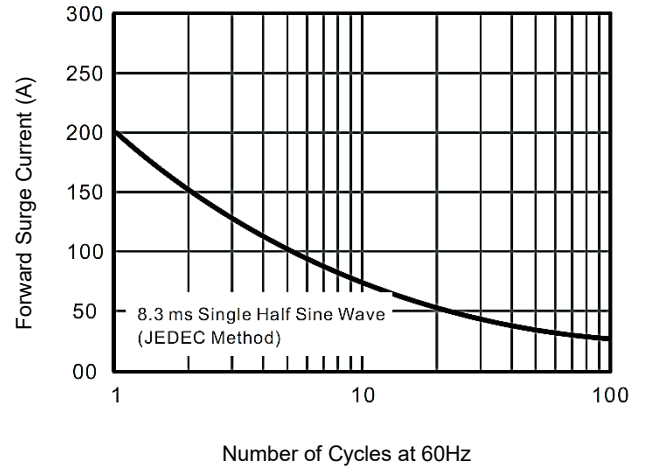


CHARACTERISTIC CURVES

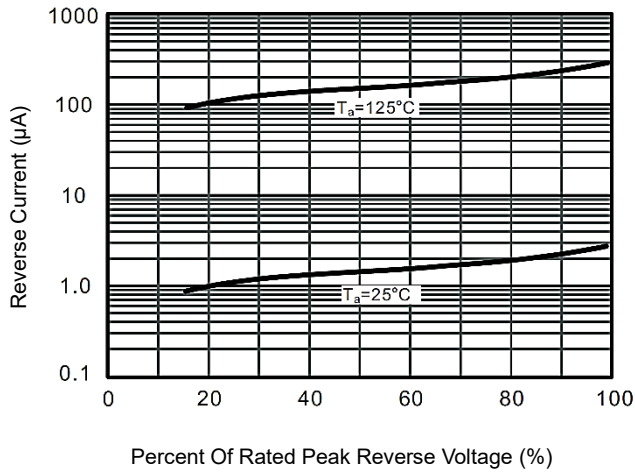
Forward Current Derating Curve



Non-Repetitive Peak Forward Surge Current



Typical Reverse Characteristics



Typical Forward Characteristics

