

### FEATURES:

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number
- Available Non-RoHS (standard) or RoHS compliant (add PBF suffix)

### MAXIMUM RATINGS

Rating	Symbol	MUR6020	MUR6030	MUR6040	Unit
Peak repetitive reverse voltage	$V_{RRM}$				
Working peak reverse voltage	$V_{RWM}$	200	300	400	V
DC blocking voltage	$V_R$				
Average rectified forward current	$I_{F(AV)}$	60 @ $T_C = 70^\circ\text{C}$			A
Peak repetitive forward current (Rated $V_R$ , square wave, 20 kHz)	$I_{FRM}$	60 @ $T_C = 150^\circ\text{C}$			A
Non-repetitive peak surge current (surge applied at rated load conditions, halfwave, single phase, 60Hz)	$I_{FSM}$	600			A
Operating and storage junction temperature range	$T_J, T_{stg}$	-65 to +175			$^\circ\text{C}$
Maximum thermal resistance Junction to case	$R_{\theta JC}$	0.8			$^\circ\text{C/W}$

### ELECTRICAL CHARACTERISTICS

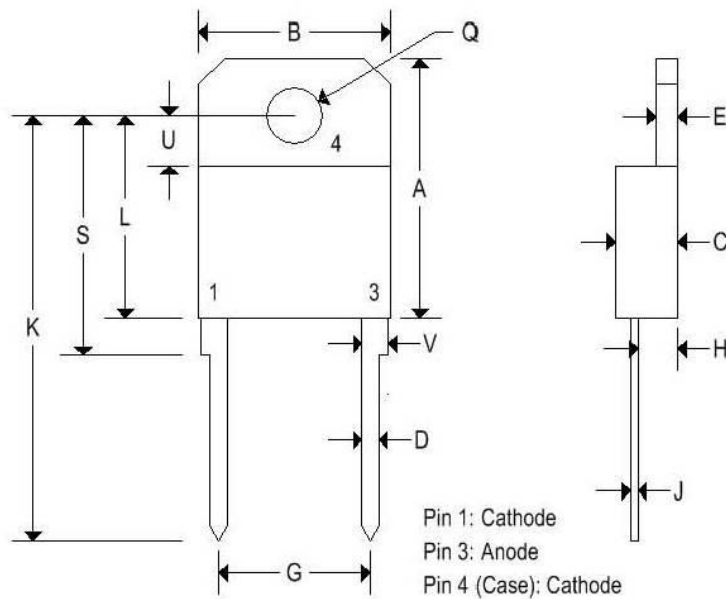
Parameter	Symbol	MUR6020	MUR6030	MUR6040	Unit
Maximum instantaneous forward voltage <sup>(1)</sup> ( $I_F = 60\text{A}$ , $T_C = 100^\circ\text{C}$ ) ( $I_F = 60\text{A}$ , $T_C = 25^\circ\text{C}$ )	$V_F$		1.4 1.5		V
Maximum instantaneous reverse current <sup>(1)</sup> (Rated dc voltage, $T_C = 100^\circ\text{C}$ ) (Rated dc voltage, $T_C = 25^\circ\text{C}$ )	$I_R$		10 60		mA $\mu\text{A}$
Maximum reverse recovery time ( $I_F = 1.0\text{A}$ , $di/dt = 15\text{A}/\mu\text{s}$ )	$t_{rr}$		100		ns

# MUR6020-MUR6040

## 60A ULTRA FAST RECOVERY RECTIFIERS

### MECHANICAL CHARACTERISTICS

Case	TO-218
Marking	Alpha-numeric
Pin out	See below



	TO-218			
	Inches		Millimeters	
	Min	Max	Min	Max
A	0.749	0.771	19.000	19.600
B	0.551	0.570	14.000	14.500
C	0.165	0.196	4.200	5.000
D	0.040	0.051	1.000	1.300
E	0.058	0.064	1.450	1.6500
G	0.411	0.450	10.420	11.440
H	0.103	0.118	2.600	3.000
J	0.016	0.023	0.400	0.600
K	1.123	1.259	28.500	32.000
L	0.579	0.602	14.700	15.300
Q	0.158	0.167	4.000	4.250
S	0.689	0.767	17.500	19.500
U	0.134	0.149	3.400	3.800
V	0.060	0.078	1.500	2.000

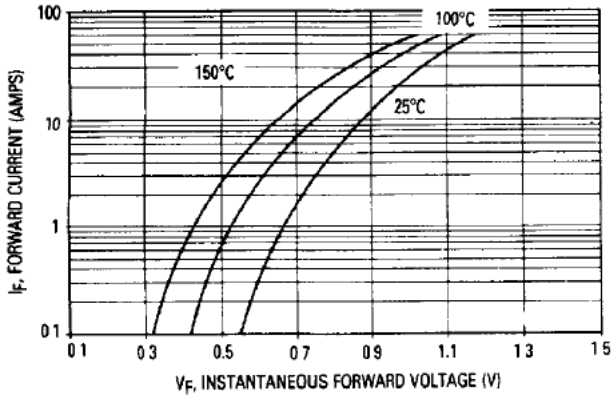


Figure 1. Typical Forward Voltage

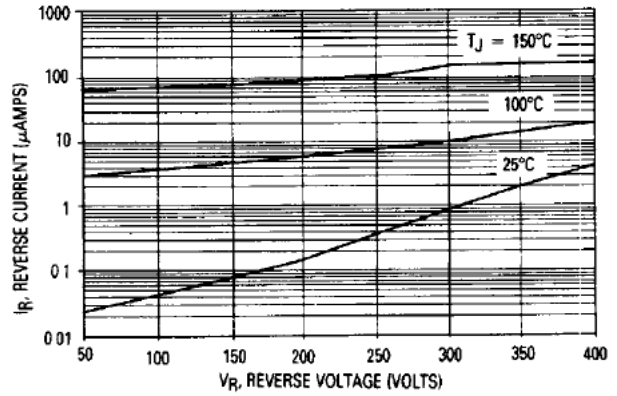


Figure 2. Typical Reverse Current

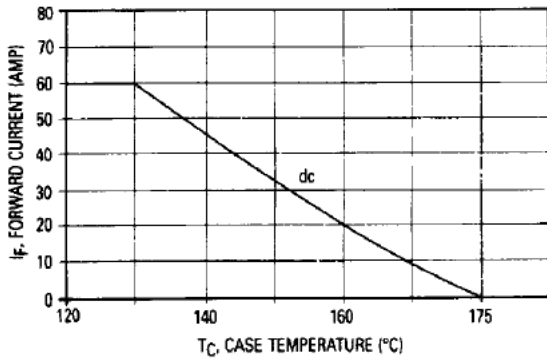


Figure 3. Current Derating, Case

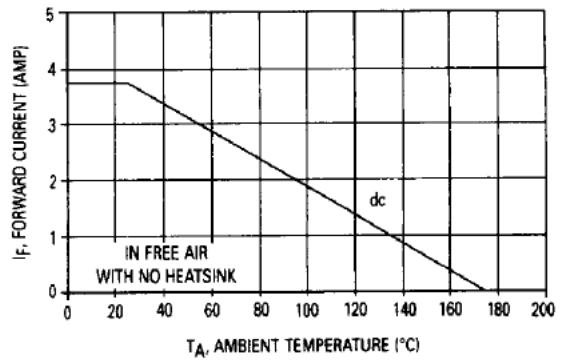


Figure 4. Current Derating, Ambient