

## Fast Recovery Epi Diodes

Reverse Voltage -200 TO 600 V

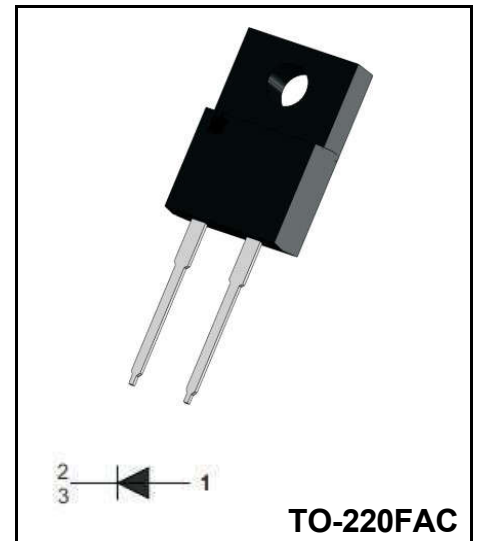
Forward Current - 20 A

### Features

- ◆ High frequency operation
- ◆ High surge forward current capability
- ◆ High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- ◆ Guard ring for enhanced ruggedness and long term reliability
- ◆ Solder dip 275 °C max. 7s, per JESD 22-B106

### Mechanical Data

- ◆ Case: TO-220FAC
- ◆ Approx. Weight: 1.483g ( 0.052oz)
- ◆ Terminals: Lead solderable per MIL-STD-202, Method 208
- ◆ Lead free finish, RoHS compliant
- ◆ Case Material: “Green” molding compound, UL flammability classification 94V-0, “Halogen-free”.

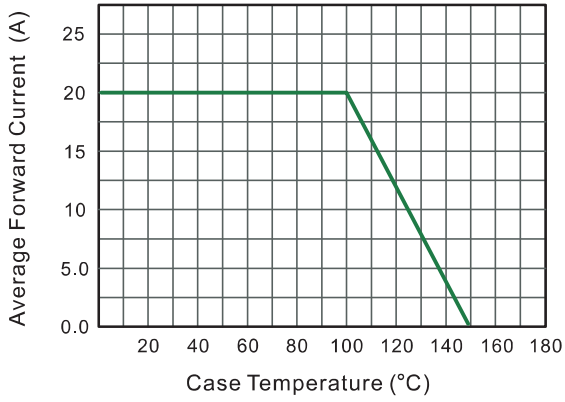


### Maximum Ratings (Per Leg) At Ta=25°C Unless Otherwise Specified

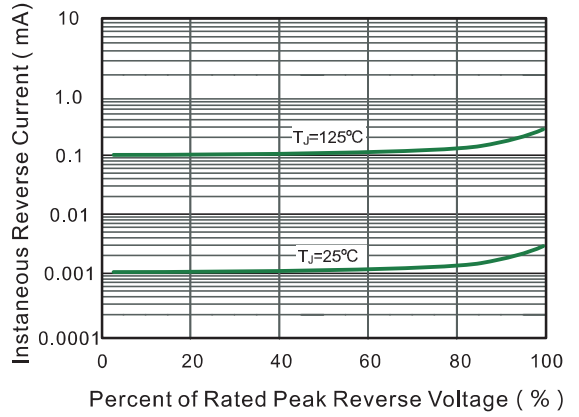
Parameter	Symbols	MUR2020FAC	MUR2040FAC	MUR2060FAC	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	200	400	600	V
Maximum RMS voltage	$V_{RMS}$	140	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	200	400	600	V
Maximum Average Forward Rectified Current @Tc=100°C	$I_{F(AV)}$	20			A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	250			A
Instantaneous forward voltage at 30A	$V_F$	1.0	1.3	1.6	V
Maximum instantaneous reverse current at rated DC blocking voltage	$I_R$	10 500			uA
Maximum Reverse Recovery Time NOTE 1	$t_{rr}$	35			nS
Maximum Thermal Resistance Junction To Case	$R_{\theta JC}$	4			°C/W
Operation Junction Temperature and Storage Temperature	$T_J, T_{STG}$	-55 ~ +150			°C

Note1: Reverse recovery test conditions IF=0.5A, IR=1.0A, Irr=0.25A

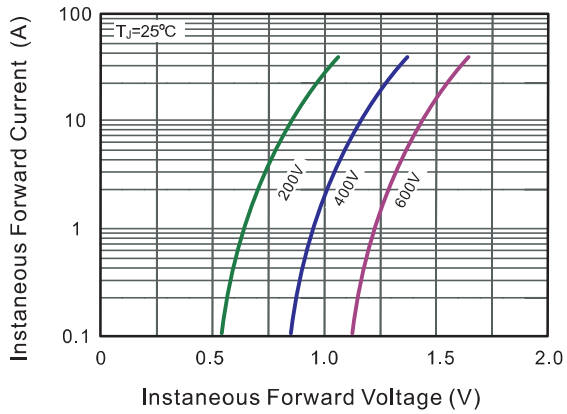
**Fig.1 Typical Forward Current Derating Curve**



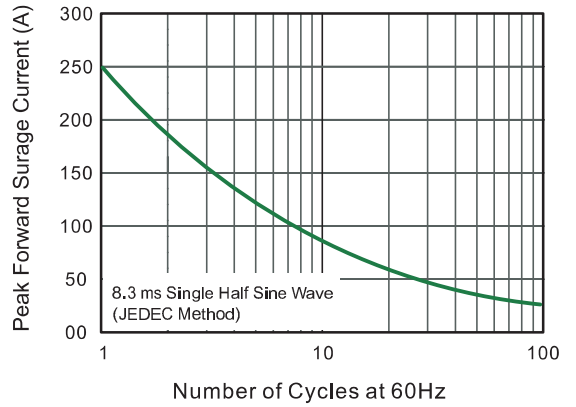
**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Forward Characteristic**



**Fig.4 Maximum Non-Repetitive Peak Forward Surge Current**



**Package Outline Dimensions Millimeters**

Package Outline  
 Through Hole Package ; 2 leads

**TO-220FAC**

