Pb Free Plating Product

MUR880G

8.0 Amperes,800 Volts Heat Sink Package Ultra Fast Recovery Rectifiers

Features

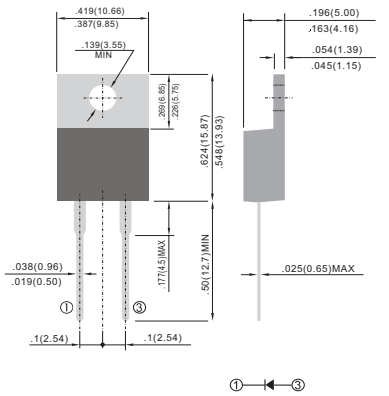
- Epitaxial wafer with good soft recovery characteristics
- Fast recovery time for hight efficiency
- Low reverse leakage current
- High surge capacity

Mechanical Data

- Case: Heatsink TO-220AC/TO-220-2P
- Terminals: Lead solderable per MIL-STD-202, Method 208
- Polarity: As marked
- Standard packaging: Any
- Weight: 0.08 ounces, 1.9 gram approximately

TO-220AC

TO-220AC/TO-220-2L Unit : inch (mm)



ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

PARAMETER	SYMBOL	MUR880G	UNIT
Marking code on the device body		MUR880G	
Repetitive peak reverse voltage	V_{RRM}	800	V
Reverse voltage, total rms value	$V_{R(RMS)}$	560	V
Forward current	$I_{F(AV)}$	8	A
Surge peak forward current, 8.3 ms single half sine-wave superimposed on rated load per diode	I_{FSM}	100	A
Junction temperature	T_J	-55 to +175	°C
Storage temperature	T_{STG}	-55 to +175	°C

THERMAL PERFORMANCE			
PARAMETER	**SYMBOL**	**LIMIT**	**UNIT**
Junction-to-lead thermal resistance	$R_{\Theta JL}$	3.5	°C/W
Junction-to-ambient thermal resistance	$R_{\Theta JA}$	6.5	°C/W
Junction-to-case thermal resistance	$R_{\Theta JC}$	4	°C/W

Thermal Performance Note: Mounted on Heat sink Size of 4"x6"x0.25" Al-Plate

ELECTRICAL SPECIFICATIONS (T_A = 25°C unless otherwise noted)					
PARAMETER	**CONDITIONS**	**SYMBOL**	**TYP**	**MAX**	**UNIT**
Forward voltage per diode (1)	I_F = 4A, T_J = 25°C	V_F	1.69	1.85	V
	I_F = 8A, T_J = 25°C		2.00	2.30	V
	I_F = 4A, T_J = 150°C		1.08	1.30	V
	I_F = 8A, T_J = 150°C		1.34	1.65	V
Reverse current @ rated V_R per diode (2)	T_J = 25°C	I_R	-	1	μA
	T_J = 150°C		-	200	μA
Junction capacitance	1 MHz, V_R=4.0V	C_J	57	-	pF
Reverse recovery time	I_F=0.5A , I_R=1.0A I_{RR}=0.25A	t_{rr}	-	25	ns

Notes:

1. Pulse test with PW=0.3 ms
2. Pulse test with PW=30 ms

CHARACTERISTICS CURVES

(T_A = 25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

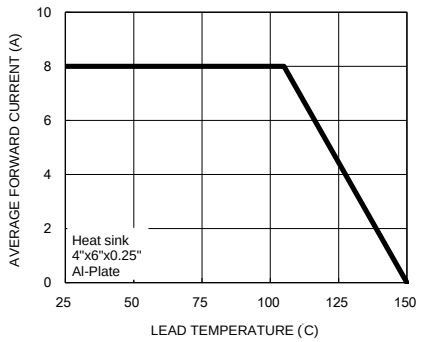


Fig.2 Typical Junction Capacitance

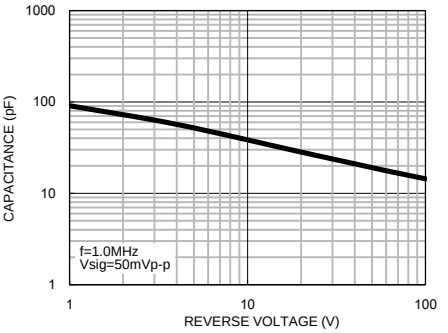


Fig.3 Typical Reverse Characteristics

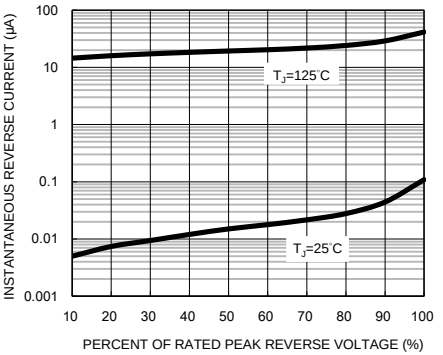


Fig.4 Typical Forward Characteristics