



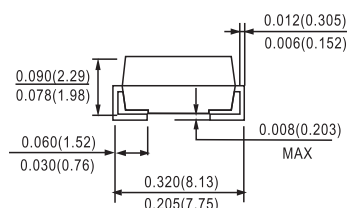
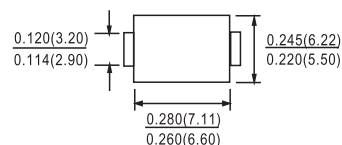
FEATURES

- 20 mJ Avalanche Energy Guaranteed
- Excellent Protection Against Voltage Transients in Switching Inductive Load Circuits
- Ultrafast 75 Nanosecond Recovery Time
- 175°C Operating Junction Temperature
- Low Forward Voltage
- Low Leakage Current
- High Temperature Glass Passivated Junction
- Reverse Voltage to 800 V
- These are Pb-Free Devices

MECHANICAL DATA

- Case: Epoxy, Molded
- Weight: 217 mg (Approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds
- Shipped in 16 mm Tape & Reel, 2500 Units per Reel
- Polarity: Notch in Plastic Body Indicates Cathode Lead

DO-214AB(SMC)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage MURS480E	V_{RRM} V_{RWM} V_R	800	V
Average Rectified Forward Current	$I_{F(AV)}$	4.0 @ $T_L = 110^\circ\text{C}$	A
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60 Hz)	I_{FSM}	70	A
Operating Junction and Storage Temperature Range	T_J, T_{stg}	-65 to +175	°C

THERMAL CHARACTERISTICS

Rating	Symbol	Value	Unit
Maximum Thermal Resistance, Junction-to-Lead	$R_{\theta JL}$	11	°C/W
Maximum Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	165	°C/W

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Maximum Instantaneous Forward Voltage (Note 1) ($I_F = 3.0$ Amps, $T_J = 150^\circ\text{C}$) ($I_F = 3.0$ Amps, $T_J = 25^\circ\text{C}$) ($I_F = 4.0$ Amps, $T_J = 25^\circ\text{C}$)	V_F	1.53 1.75 1.85	V
Maximum Instantaneous Reverse Current (Note 1) (Rated dc Voltage, $T_J = 150^\circ\text{C}$) (Rated dc Voltage, $T_J = 25^\circ\text{C}$)	I_R	900 25	μA
Maximum Reverse Recovery Time ($I_F = 1.0$ A, $di/dt = 50$ A/ μs) ($I_F = 0.5$ A, $I_R = 1.0$ A, $I_{REC} = 0.25$ A)	t_{rr}	100 75	ns
Maximum Forward Recovery Time ($I_F = 1.0$ Amp, $di/dt = 100$ Amp/ μs , Recovery to 1.0 V)	t_{fr}	75	ns
Controlled Avalanche Energy	W_{AVAIL}	20	mJ

1. Pulse Test: Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$.



TAYCHIPST

SWITCHMODE Power Rectifiers

MURS480ET3G

800V 4.0A

RATINGS AND CHARACTERISTIC CURVES

MURS480ET3G

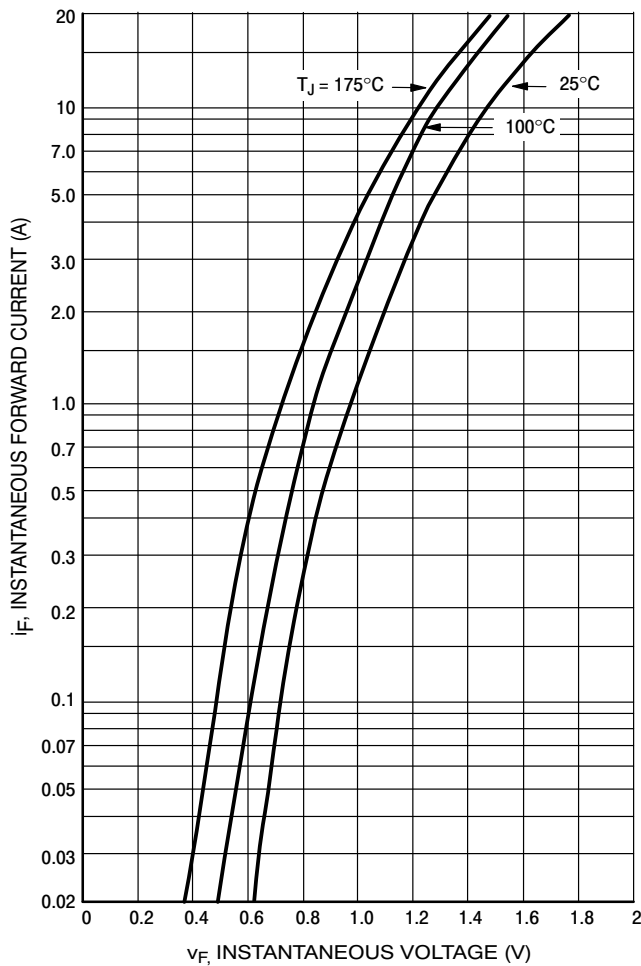


Figure 1. Typical Forward Voltage

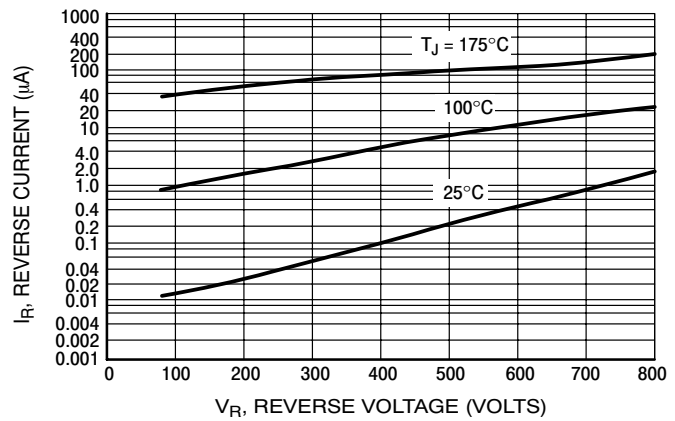


Figure 2. Typical Reverse Current

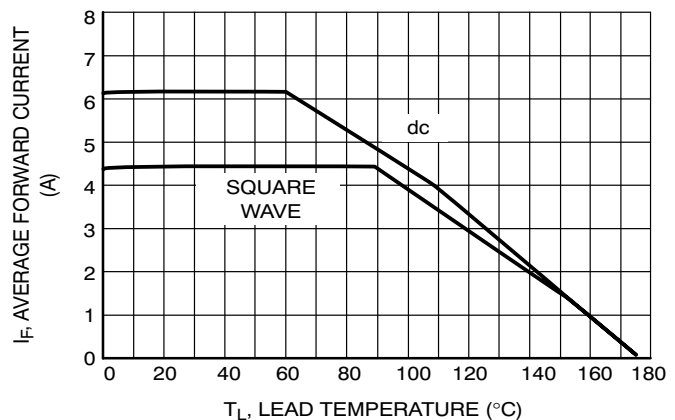


Figure 3. Current Derating Lead

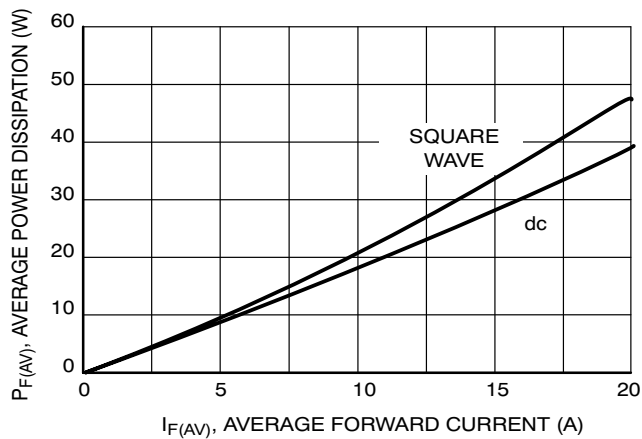


Figure 4. Power Dissipation

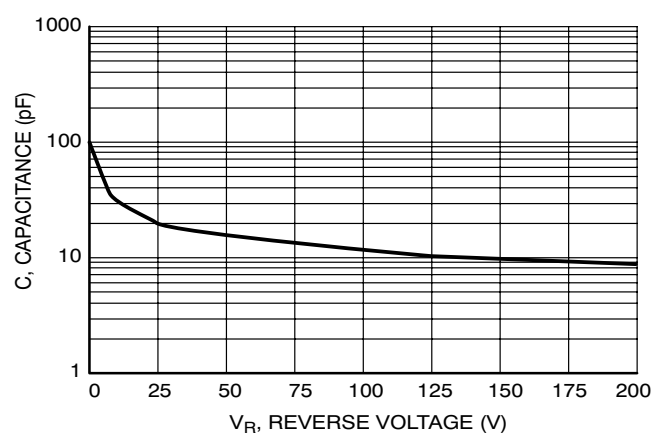


Figure 5. Typical Capacitance