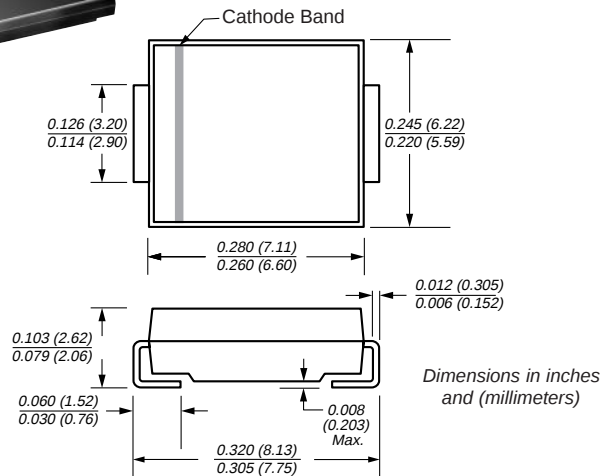
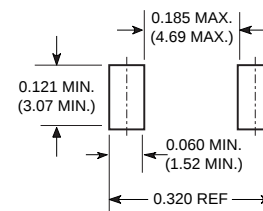


**Ultrafast Rectifiers****Reverse Voltage** 400 to 600V
Forward Current 3.0A
Reverse Recovery Time 50ns**DO-214AB (SMC)****Mounting Pad Layout****Mechanical Data****Case:** JEDEC DO-214AB molded plastic body over passivated chip**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026**Polarity:** Color band denotes cathode end**Weight:** 0.007oz., 0.21g**Features**

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
- Ultrafast recovery time for high efficiency
- Glass passivated junction
- High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	MURS340	MURS360	Unit
Device Marking Codes		MG	MJ	
Maximum repetitive peak reverse voltage	V_{RRM}	400	600	V
Working peak reverse voltage	V_{RWM}	400	600	V
Maximum DC blocking voltage	V_{DC}	400	600	V
Maximum average forward rectified current at: (See figure 1) $T_L = 130^\circ\text{C}$ $T_L = 115^\circ\text{C}$	$I_{F(AV)}$	3.0 4.0		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125		A
Typical thermal resistance junction to ambient	$R_{\theta JL}$	11		°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175°C		°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Maximum instantaneous forward voltage ⁽¹⁾ $I_F = 3.0\text{A}, T_J = 25^\circ\text{C}$ $I_F = 4.0\text{A}, T_J = 25^\circ\text{C}$ $I_F = 3.0\text{A}, T_J = 150^\circ\text{C}$	V_F	1.25 1.28 1.05	V
Maximum instantaneous reverse current at rated DC blocking voltage ⁽¹⁾ $T_J = 25^\circ\text{C}$ $T_J = 150^\circ\text{C}$	I_R	10 250	μA
Maximum reverse recovery time at $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$	t_{rr}	50	ns
Maximum reverse recovery time at, $I_F=1.0\text{A}, di/dt=50\text{A}/\mu\text{s}, V_R=30\text{V}, I_{rr}=10\% I_{RM}$	t_{rr}	75	ns
Maximum forward recovery time $I_F=1.0\text{A}, di/dt=100\text{A}/\mu\text{s}, \text{Rec. to } 1.0\text{V}$	t_{fr}	25	ns

Note: (1) Pulse test: $t_p = 300\mu\text{s}$, duty cycle $\leq 2\%$

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig. 1 – Forward Current Derating Curve

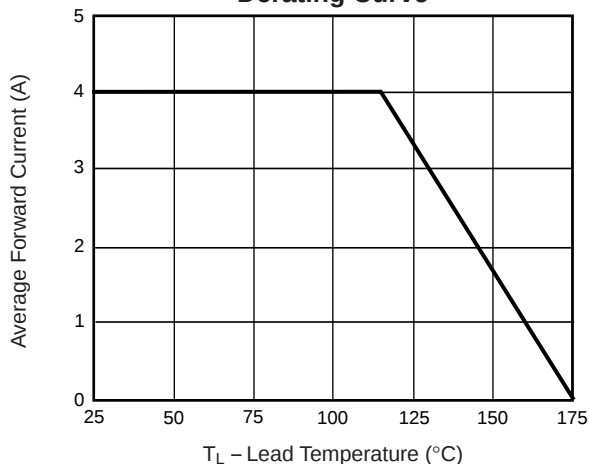


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

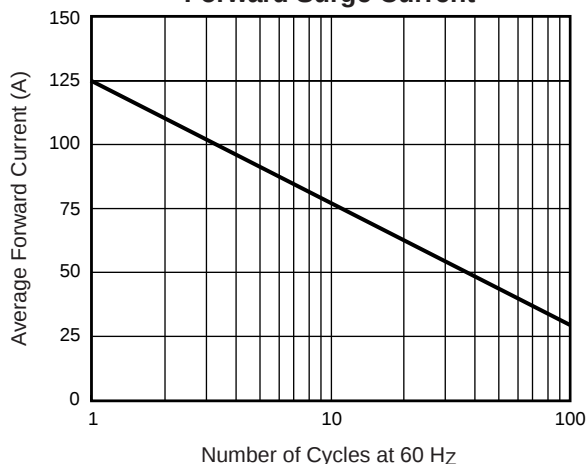


Fig. 3 – Typical Instantaneous Forward Characteristics

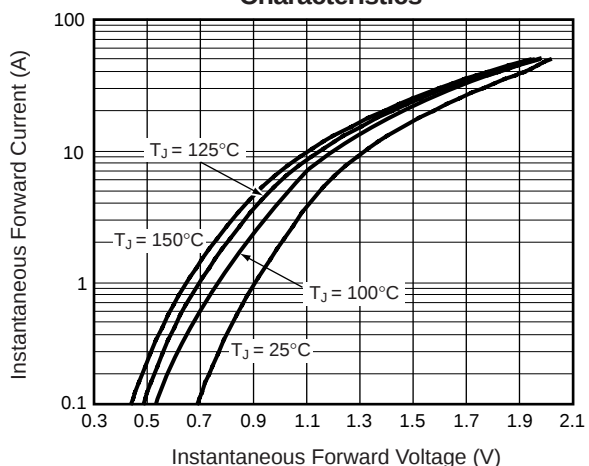


Fig. 4 – Typical Reverse Characteristics

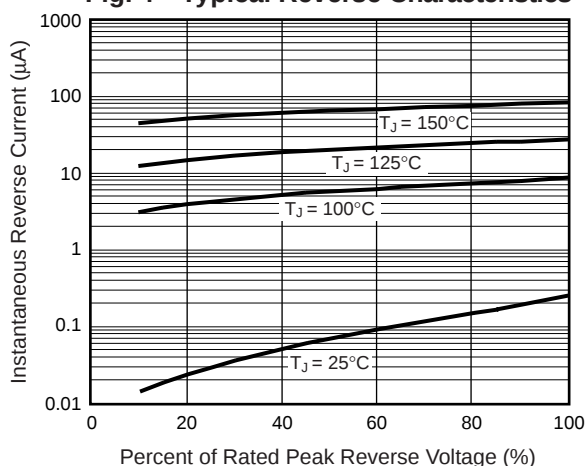


Fig. 5 – Typical Junction Capacitance

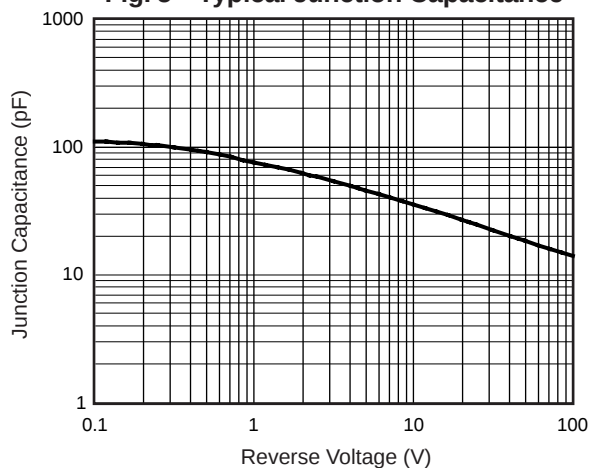


Fig. 6 – Typical Reverse Switching Characteristics

