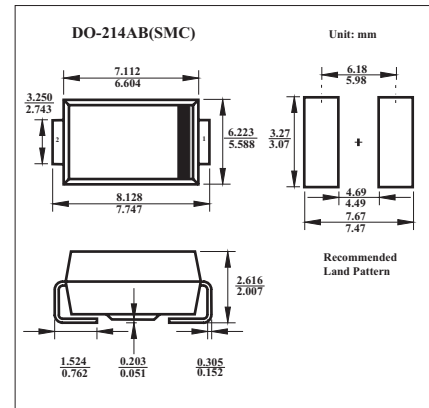


Ultrafast Rectifiers

MURS340

■ 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



■ Maximum Ratings & Thermal Characteristics Ratings at 25°C

Parameter	Symbol	Rating	Unit
Peak repetitive reverse voltage	V _{RRM}	400	V
Working peak reverse voltage	V _{RWM}		
DC blocking voltage	V _R		
Average rectified forward current	I _{F(AV)}	3	A
T _L = 130°C			
T _L = 115°C			
Non-repetitive peak surge current	I _{FSM}	125	A
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +175	°C
Typical thermal resistance junction to ambient	R _{θJL}	11	°C/W

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Rating	Unit
Instantaneous forward voltage *	V _F	I _F = 3.0 A, T _J = 25°C	1.20	V
		I _F = 4.0 A, T _J = 25°C	1.25	
		I _F = 3.0 A, T _J = 150°C	1.05	
Instantaneous reverse current *	I _R	Rated dc Voltage, T _J = 25°C	10	μA
		Rated dc Voltage, T _J = 150°C	250	
Maximum reverse recovery time	t _{rr}	I _F = 0.5A, I _R = 1.0A, I _{rr} = 0.25A	50	ns
		I _F = 1.0A, di/dt = 50A/μs, V _R = 30V, I _{rr} = 10% I _{RM}	75	ns
		I _F = 1.0A, di/dt = 100A/μs, Rec.to 1.0V	25	ns

* Pulse test: pulse width = 300 μs, duty cycle ≤ 2.0%.

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■ Ratings and Characteristic Curves (TA=25°C Unless otherwise noted)

Fig. 1 – Forward Current Derating Curve

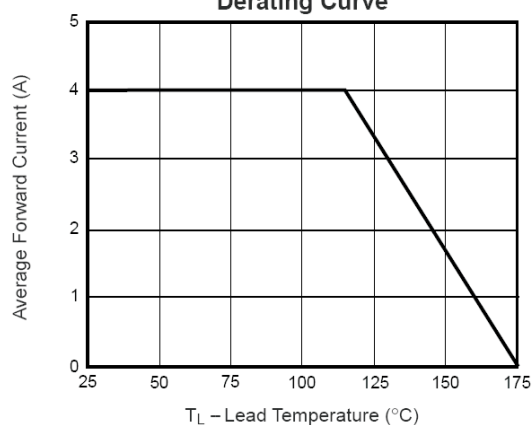


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

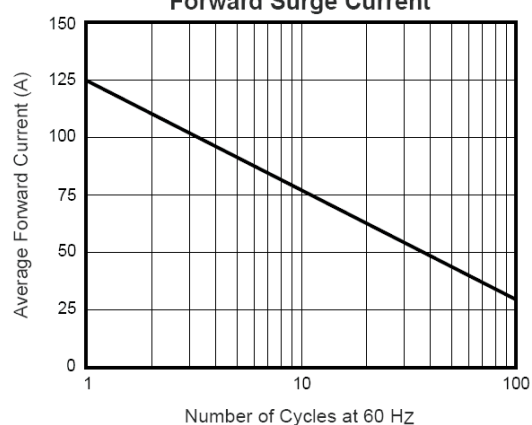


Fig. 3 – Typical Instantaneous Forward Characteristics

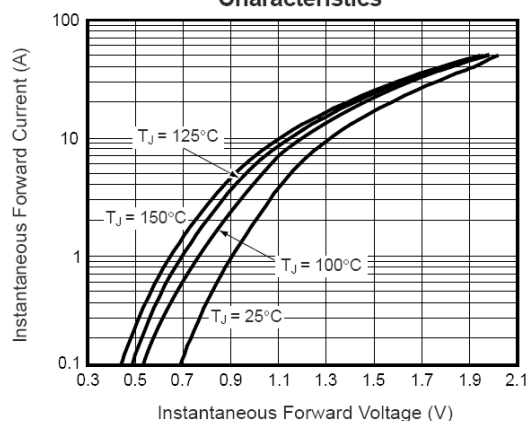


Fig. 4 – Typical Reverse Characteristics

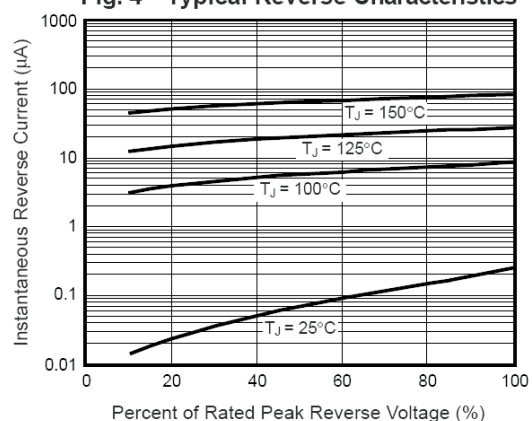


Fig. 5 – Typical Junction Capacitance

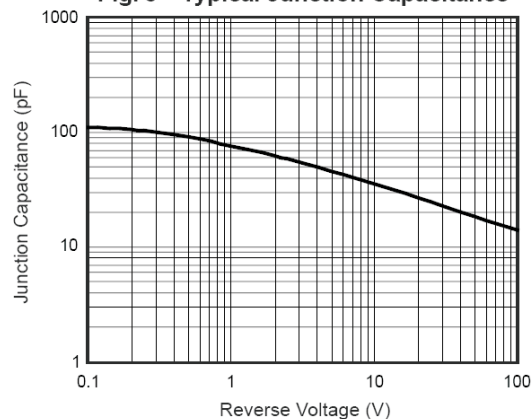


Fig. 6 – Typical Reverse Switching Characteristics

