Super-Fast Rectifiers MURS560

Features



- For surface mounted applications
- Ideal for automated placement
- Low forward voltage drop
- High surge current capability
- RoHS Compliant

Mechanical Data

- Case: SMC molded plastic
- Molding compound, UL flammability classification rating 94V-0
- Terminals: Solder plated, solderable per MIL- STD-202,Method 208
- Polarity: Color band denotes cathode end

Maximum Ratings (@T_A = 25°C unless otherwise specified)

Characteristic	Symbol	MURS560	Units
Peak repetitive reverse voltage	V_{RRM}	600	V
RMS reverse voltage	V_{RMS}	420	V
DC blocking voltage	V_{DC}	600	V
Maximum average forward output current	$I_{F(AV)}$	5.0	A
Peak forward surge current, 8.3ms single half-sine-wave	I_{FSM}	150	A

Thermal Characteristics

Parameter	Symbol	MURS560	Units
Typical thermal resistance (Note 1)	$R_{\Theta JA}$	47	°C /W
	$R_{\Theta JC}$	13	
	$R_{\Theta JL}$	12	
Operating junction temperature range	T_J	- 55 ---- + 150	°C
Storage temperature range	T_{STG}	- 55 ---- + 150	°C

Note:

1. Device mounted on PCB with 10 mm x 20 mm x 0.1mm copper pad areas

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Electrical Characteristics (@T_A = 25°C unless otherwise specified)

Parameter	Symbol	Test conditions		Typ.	Max.	Units
Maximum instantaneous forward voltage	V_F	I_F=5.0A	@T_A=25°C	--	1.3	V
Maximum Reverse current	I_R	Rated V_R,	@T_A=25°C	--	10	μ A
			@T_A=125°C	--	300	
Maximum Reverse Recovery Time	trr	I_F=0.5A,I_{RM}=1A,$I_{R(REC)}$=0.25A		--	50	ns

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MURS560

Fig.1-Forward Current Derating Curve

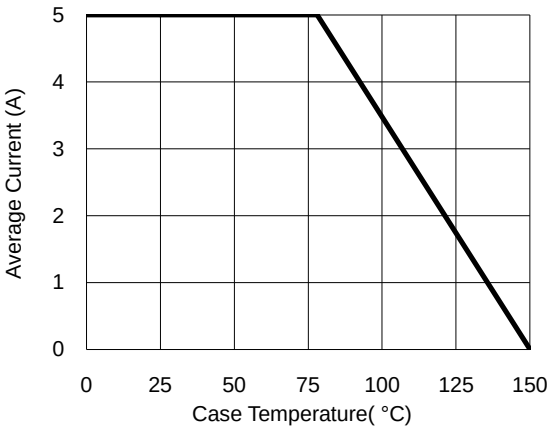


Fig.2- Surge Current Derating Curve

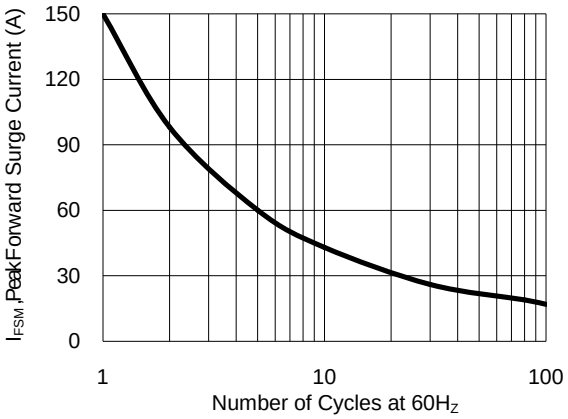


Fig.3- Typical Forward Voltage Characteristic

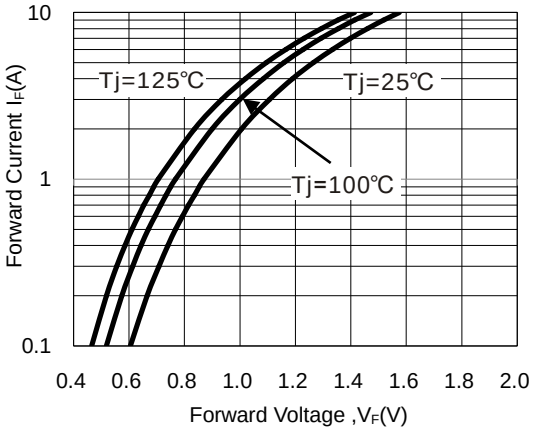
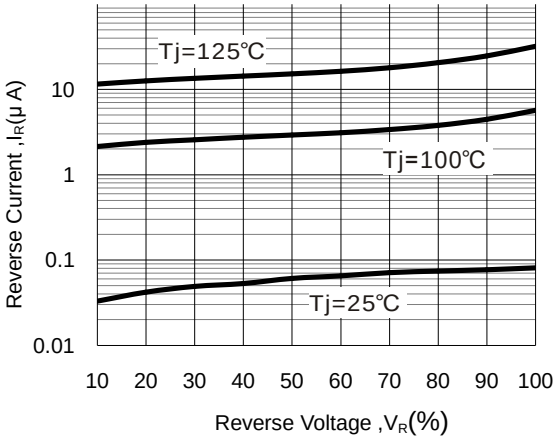
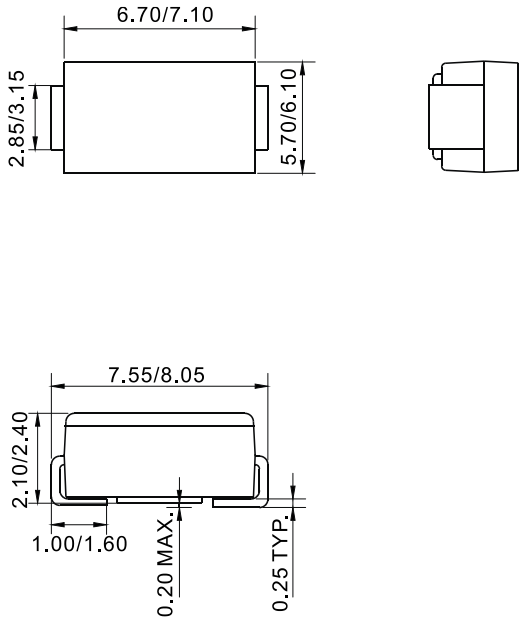


Fig.4- Typical Reverse Characteristic

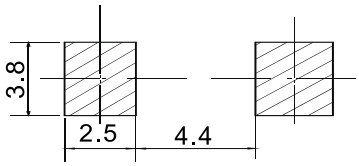


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Package Outline Dimensions(unit:mm)



Mounting Pad Layout(unit:mm)



Ordering Information

Part No.	Marking	Package	Shipping
MURS560	MURS560	SMC	3000 / Tape&Reel