

MUR560S

Surface Mount Super Fast Recovery Rectifier

Reverse Voltage - 600 V

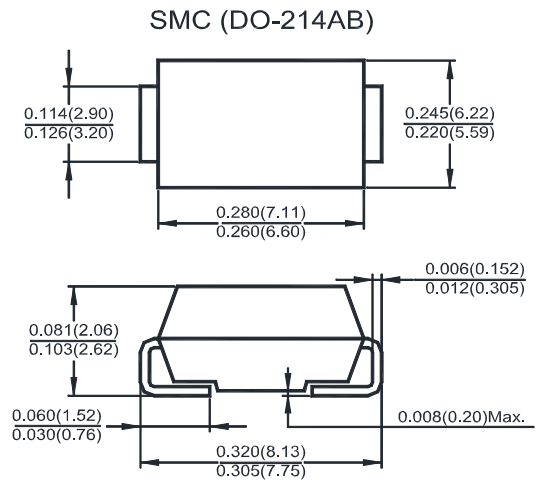
Forward Current - 5 A

Features

- For surface mounted applications
- Low profile package
- Super fast reverse recovery time

Mechanical Data

- **Case:** SMC(DO-214AB)
- **Terminals:** Solderable per MIL-STD-750, Method 2026



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

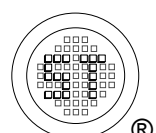
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	Value	Units
	Marking	MURC5J	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Current at $T_C = 100^\circ\text{C}$	$I_{F(AV)}$	5	A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	110	A
Maximum Forward Voltage at $I_F = 5\text{ A}$	V_F	1.3	V
Maximum DC Reverse Current at $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage at $T_a = 125^\circ\text{C}$	I_R	5 100	μA
Typical Junction Capacitance ¹⁾	C_j	50	pF
Maximum Reverse Recovery Time ²⁾	t_{rr}	50	ns
Typical Thermal Resistance ³⁾	$R_{\theta JA}$	40	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^\circ\text{C}$

¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V D.C.

²⁾ Measured with $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$.

³⁾ P.C.B mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.



Electrical Characteristics Curves

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram

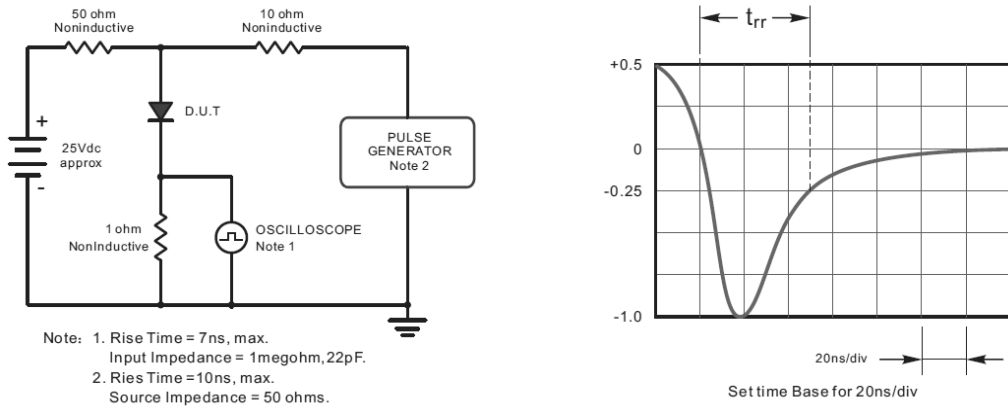


Fig.2 Maximum Average Forward Current Rating

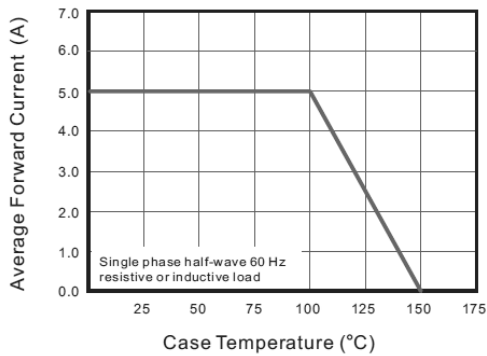


Fig.3 Typical Reverse Characteristics

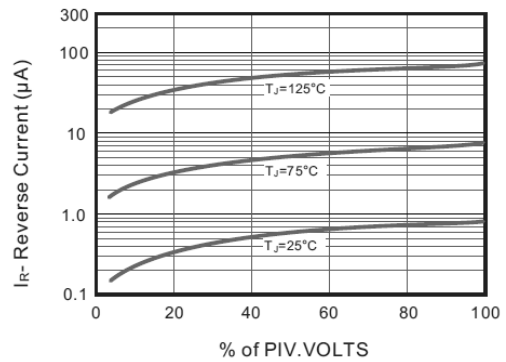


Fig.4 Typical Forward Characteristics

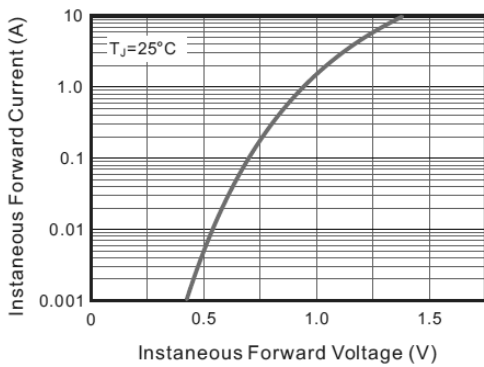


Fig.5 Typical Junction Capacitance

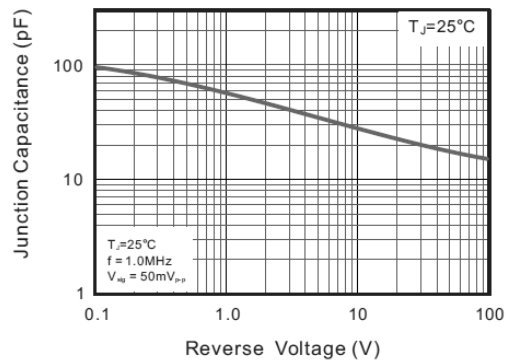


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current

