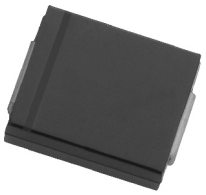
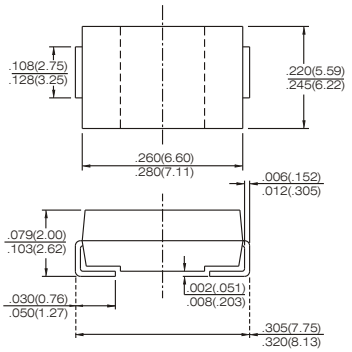
S5AC thru S5MC

SURFACE MOUNT GLASS PASSIVATED RECTIFIER

VOLTAGE - 50 TO 1000 VOLTS CURRENT - 5.0 AMPERES



SMC/DO-214AB



Dimensions in inches and (millimeters)

FEATURES

- Glass Passivated Die Construction
- Low Forward Voltage Drop and High Current Capability
- Surge Overload Rating to 100A Peak
- Ldeally Suited for Automated Assembly

MECHANICAL DATA

Case：Molded plastic
Case Molded UL flammability rating classification 94V-0
Moisture sensitivity：Level 1 per J-STD-020A
Terminals：Solder plated Terminal-solderable per MIL-SRD-202, Method 208
Polarity：Cathode band or cathode notch
Weight：0.21grams (approx)
Ordering Information：See Page 2

MAXIMUM RATIXGS AND ELECTRICAL CHARACTERISTICS

Single phase, half wave, 60Hz, resistive or inductive load
For capacitive load, derate current by 20%

	SYMBOL	S5AC	S5BC	S5DC	S5GC	S5JC	S5KC	S5MC	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Average Rectified Output Current at T_T =75°C	$I_{(AV)}$	5.0							Amps
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	100							Amps
Forward Voltage @I_F= 5.0A	V_{FM}	1.15							Volts
Maximum DC Reverse Current (NOTE 1) T_A=25°C at Rated DC Blocking Voltage T_A=125°C	I_R	10 250							μA
Typical Thermal Resistance, Junction to Terminal (NOTE 2)	C_J	40							pF
Maximum Thermal Resistance (NOTE 2)	$R_{\theta JT}$	10							°C / W
Operating and Storage Temperature Range	T_J T_{STG}	-65 to +150							°C

NOTES：
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
2. Thermal Resistance Junction to Terminal, unit mounted on PC board with 5.0mm² (0.013mm thick) copper pads as Heat Sink.

SURFACE MOUNT GLASS PASSIVATED RECTIFIER

RATINGS AND CHARACTERISTIC CURVES S5AC THRU S5MC

Fig. 1 Forward Current Derating Curve

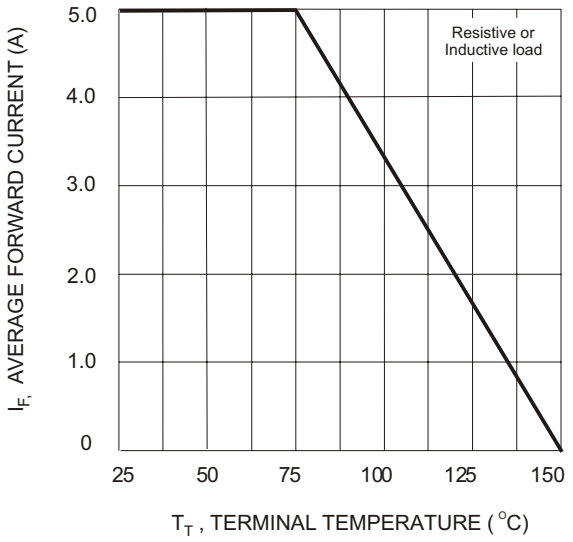


Fig. 2 Typical Forward Characteristics

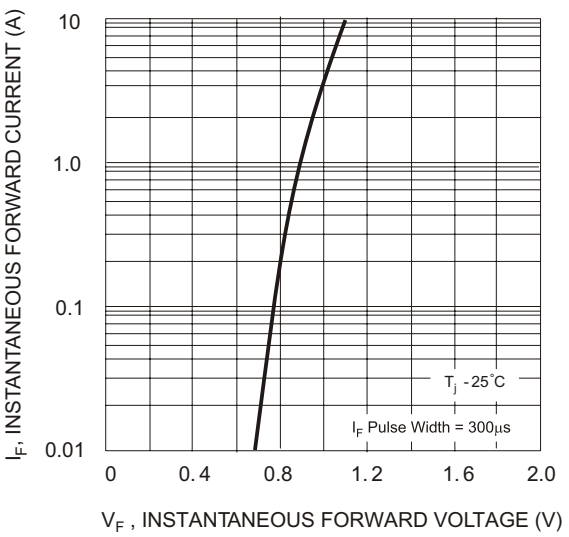


Fig. 3 Forward Surge Current Derating Curve

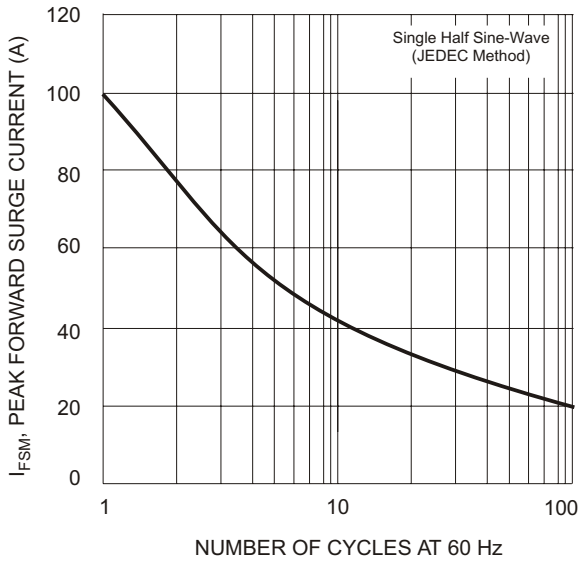


Fig. 4 Typical Reverse Characteristics