



S6A THRU S6M

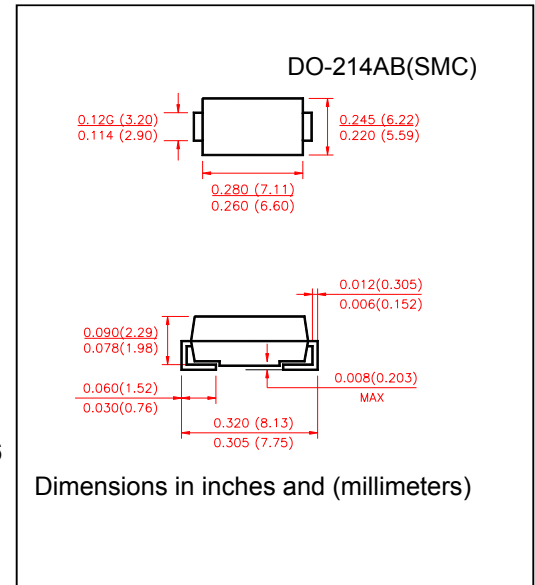
VOLTAGE RANGE
50 to 1000 Volts
CURRENT
6.0 Ampere

Features

- Plastic package has underwrites laboratory flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief, ideal for automated placement
- Glass Passivated chip junction
- High temperature soldering: 250°C/10 second at terminals

Mechanical Data

- Case: JEDED SMC (DO-214AB) molded plastic
- Terminals: Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.007 ounces, 0.21 gram



Maximum Ratings and Electrical Characteristics

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

TYPE NUMBER	SYMBOLS	S6A	S6B	S6D	S6G	S6J	S6K	S6M	UNIT
Maximum Reverse Peak Repetitive 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
Maximum Average Forward Rectified Output Current, 0.06"(1.5mm) lead length at $T_C=100^\circ C$	$I_{(AV)}$	6.0							Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							Amps
Maximum Instantaneous Forward Voltage drop Per Bridge element 3.0A	V_F	1.1							Volts
Maximum Reverse Current at rated DC blocking voltage per element	$T_A=25^\circ C$	10							μ Amps
	$T_A=100^\circ C$	100							
Typical junction capacitance (NOTE 1)	C_J	60							pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JL}$	45							$^\circ C/W$
	$R_{\theta JA}$	12							$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	(-55 to +150)							$^\circ C$

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on P.C.B. with 0.3×0.3"(8.0 × 8.0mm) copper pads.



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VOLTAGE RANGE

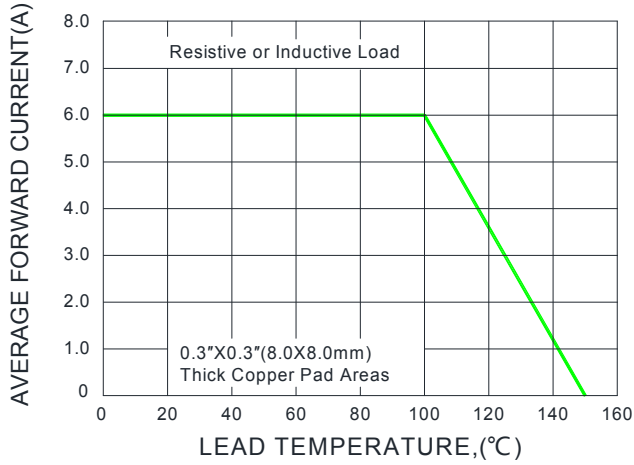
50 to 1000 Volts

CURRENT

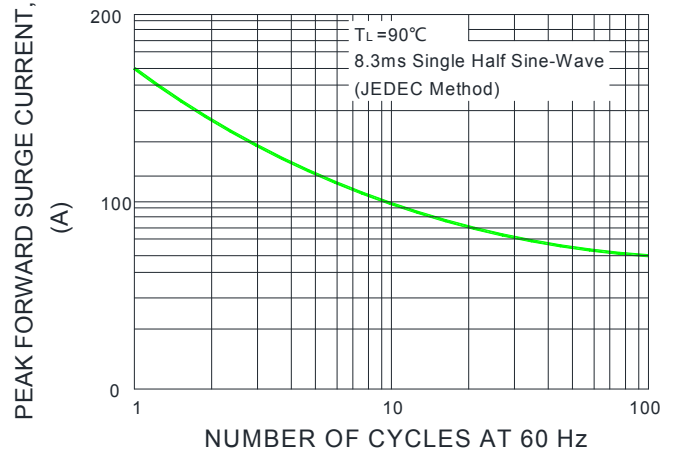
6.0 Ampere

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

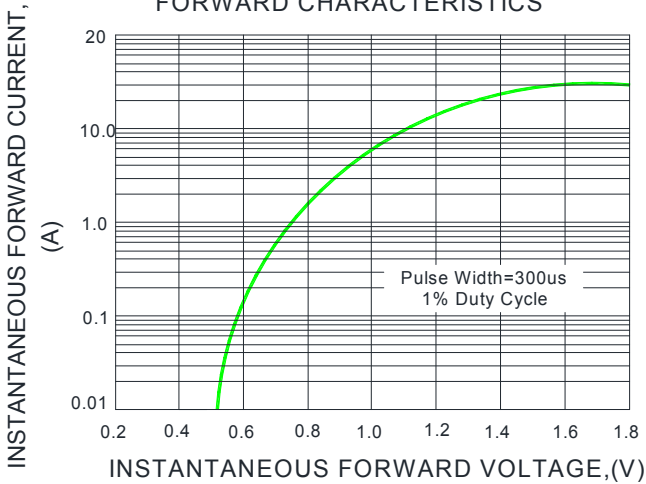
F1G.1-FORWARD CURRENT DERATING CURVE



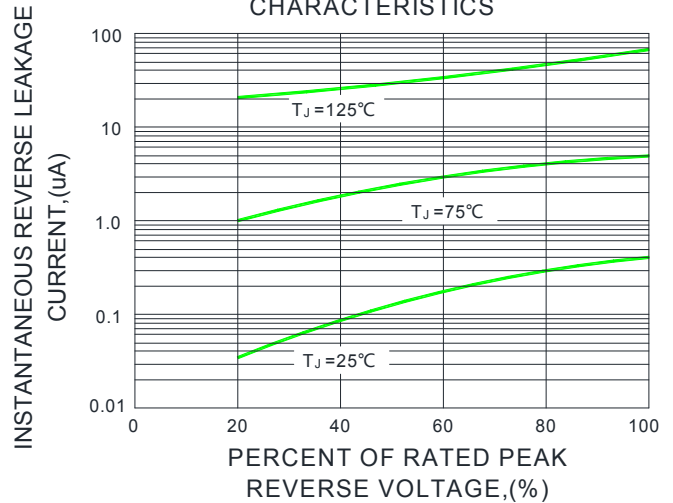
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE

