


S2A S2B S2D S2G S2J S2K S2M Surface Mount Rectifiers SMB

Specifications

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Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	S2A	S2B	S2D	S2G	S2J	S2K	S2M	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_L = 100^\circ\text{C}$	$I_{(AV)}$	2.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50							A
Maximum Instantaneous Forward Voltage @ 2.0A	V_F	1.1							V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_R	5.0 125							μA μA
Typical Reverse Recovery Time (Note 1)	T_{rr}	1.5							μS
Typical Junction Capacitance (Note 2)	C_j	30							pF
Typical Thermal resistance (Note 3)	$R_{\theta JL}$ $R_{\theta JA}$	16 53							$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

- Notes:
- Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$
 - Measured at 1 MHz and Applied $V_R = 4.0$ Volts
 - Measured on P.C. Board with 0.4" x 0.4" (10mm x 10mm) Copper Pad Areas.