🦳 四川旭茂微科技有限公司

Sichuan Xu Mao Micro Technology Co., Ltd

S5A THRU S5M SURFACE MOUNT GLASS PASSIVATED JUNCTION RECTIFIER

REVERSE VOLTAGE: 50 to 1000 VOLTS FORWARD CURRENT: 5.0 AMPERE

FEATURES

- · For surface mounted applications
- · Low profile package
- · Built-in strain relief
- · Easy pick and place
- · Low forward voltage drop
- · Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- · High temperature soldering : 260°C /10 seconds at terminals

<u>0.173(4.40)</u> 0.181(4.60) 0.081(2.05) 0.049(1.25) 0.057(1.45) 0.201(5.10) 0.217(5.50) 0.138(3.50) 0.146(3.70) 0.007(0.18) 0.022(0.55) 0.012(0.30) 0.020(0.50)

Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic, SMBFL Terminals: Pure tin plated, lead free Polarity: Indicated by cathode band

Packaging: 12mm tape per EIA STD RS-481

Weight: 0.060 gram

Maximum Ratings and Electrical Characteristics

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

For capacitive load, derate current by 20%.

	Symbols	S5A	S5B	S5D	S5G	S5J	S5K	S5M	Units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T _L =75℃	I(AV)	5.0							Amp
Peak Forward Surge Current,									
8.3ms single half-sine-wave	Ifsm	Ifsm 100							
superimposed on rated load (JEDEC method)									
Maximum Forward Voltage at 5.0A	VF	1.15							Volts
Maximum Reverse Current at T _A =25℃ at Rated DC Blocking Voltage T _A =125℃	IR	10 250							μАтр
Typical Junction Capacitance (Note 1)	CJ	53							pF
Typical Thermal Resistance (Note 2)	RөлL	10							℃/W
Maximum Reverse Recovery Time (Note 3)	Trr	2.5							μS
Operating Junction Temperature Range	TJ	-55 to +150							r
Storage Temperature Range	Tstg	-55 to +150							Ç

NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal resistance from junction to lead mounted on P.C.B. with 0.4×0.4 " (10.0×10.0 mm) copper pad areas 3- Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, I_R=.25A.

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RATINGS AND CHARACTERISTIC CURVES

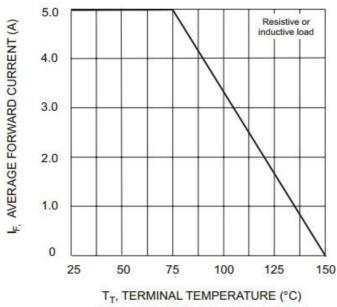
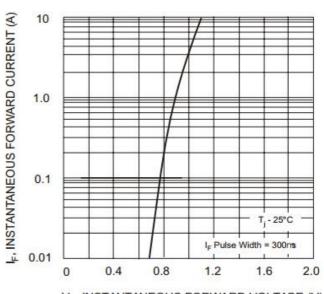


Fig. 1 Forward Current Derating Curve



V_F, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics

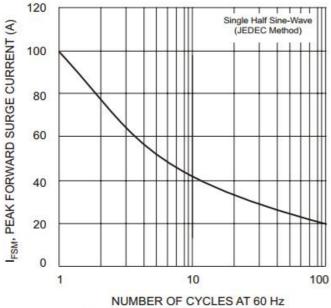
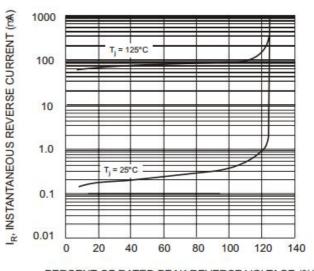


Fig. 3 Forward Surge Current Derating Curve



PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 4 Typical Reverse Characteristics