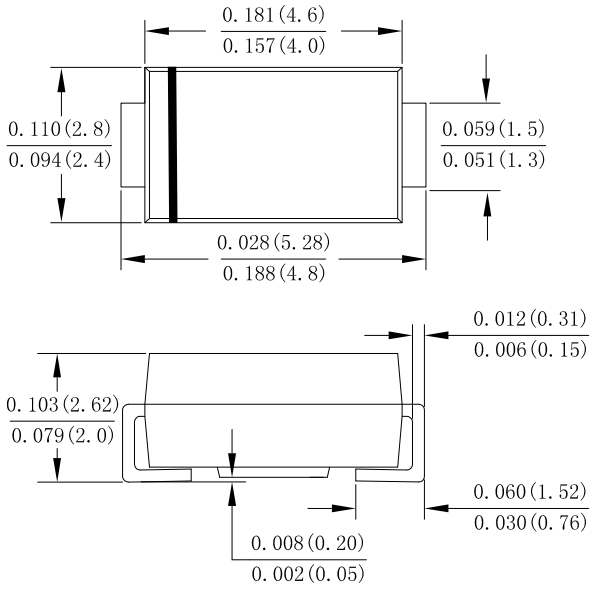
S1M

1.0 AMP Surface Mount Passivated Rectifiers

Features

Glass Passivated Die Construction
Low forward voltage drop
High current capability
High reliability
Metal silicon junction,majority carrier conduction
Plastic Case Material has UL Flammability
Classication Rating 94V-0

Case: SMA(DO-214AC)



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number

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	S1M	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30	A
Maximum Instantaneous Forward Voltage at 1 A	V_F	1.0	V
Maximum DC Reverse Current T_a = 25 °C at Rated DC Blocking Voltage T_a =125 °C	I_R	5 50	μA
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

Fig.1 Forward Current Derating Curve

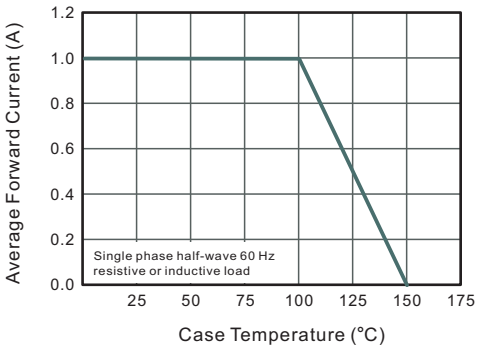


Fig.2 Typical Instaneous Reverse Characteristics

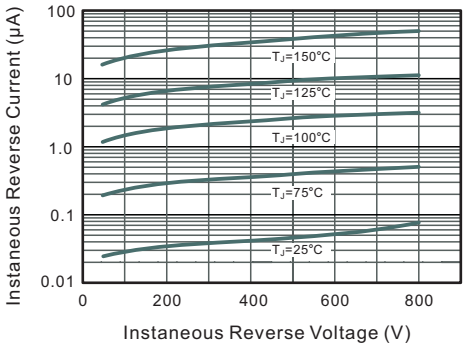


Fig.3 Typical Forward Characteristic

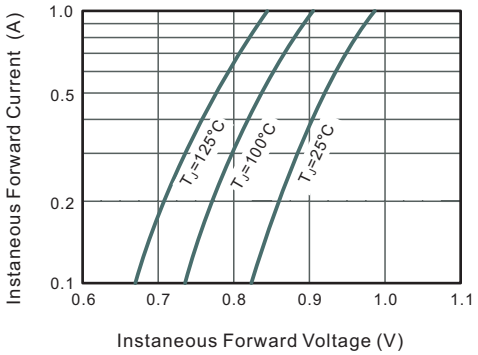


Fig.4 Maximum Non-Repetitive Peak Forward Surage Current

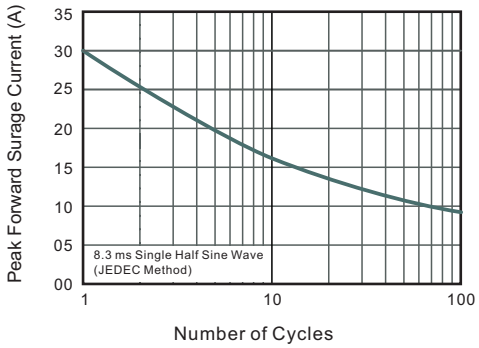
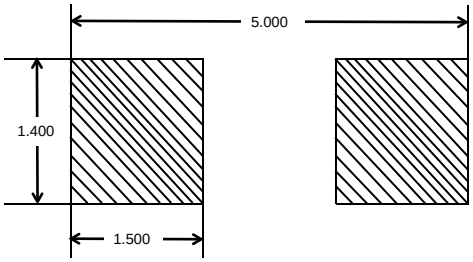


Fig.5 Mounting PAD Layout

SMA PAD LAYOUT



Disclaimer

The information presented in this document is for reference only. Chongqing Zhongjing Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Zhongjing or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.