CE

CHENYI ELECTRONICS

S1A THRU S1M

SURFACE MOUNT GALSS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.0Ampere

FEATURES

. For surface mounted applications

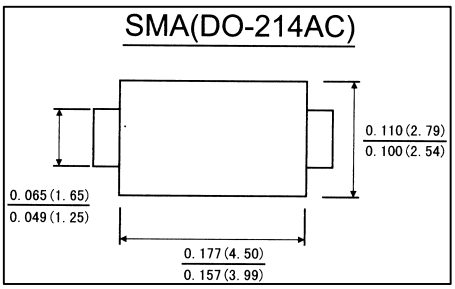
. Glass passivated junction

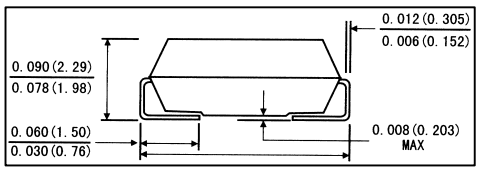
. Low profile package

. Built-in strain relief , ideal for automated placement

. Plastic package has Underwrites Laboratory Flammability Classification 94V-0

. High temperature soldering guaranteed: 250℃/10 seconds, at terminals





Dimensions in inches and (millimeters)

MECHANICAL DATA

. **Case:** JEDEC SMA(DO-214AC) molded plastic

. **Terminals:** Plated axial leads,solderable per MIL-STD-750,method 2026

. **Polarity:** Color band denotes cathode end

. **Mounting Position:** Any

. **Weight**: 0.002 ounce, 0.064 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25℃ ambient temperature unless otherwise specified,Single phase,half wave 60Hz,resistive or inductive) load. For capacitive load,derate current by 20%)

	Symbols	S1A	S1B	S1D	S1G	S1J	S1K	S1M	Units
Maximum Recurrent 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
Maximum average forward rectified current (See fig.1)	$I_{(AV)}$	1.0							Amp
Peak forward surge current (8.3ms half sing wave superimposed on rated load (JEDEC method)T_L=110℃	I_{FSM}	40.0			30.0				Amps
Maximum instantaneous forward voltage at 1.0 A	V_F	1.1							Volts
Maximum reverse recovery time(Note 1) T_A=25℃	I_R	1.0			5.0				μA
current at rated DC Blocking Voltage T_A=125℃		50							
Typical Thermal Resistance(Note 1)	$R\theta_{JL}$ $R\theta_{JA}$	27.0 25.0			30.0 85.0				℃/W
Typical reverse recovery time(Note 2)	Trr	1.8							μS
Operating and storage temperature range	T_J T_{STG}	-65 to +150							℃

Notes: 1.Thermal resistance from junction to ambient and from junction to lead mounted on 0.2 X 0.2"(5.0 X 5.0mm) copper pad areas.

2.Test conditions:IF=0.5A,IR=1.0A,Irr=0.25A.

CE

CHENYI ELECTRONICS

S1A THRU S1M

SURFACE MOUNT GALSS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.0Ampere

RATINGS AND CHARACTERISTIC CURVES S1A THRU S1M

FLG.1-FORWARD CURRENT DERATING CURVE

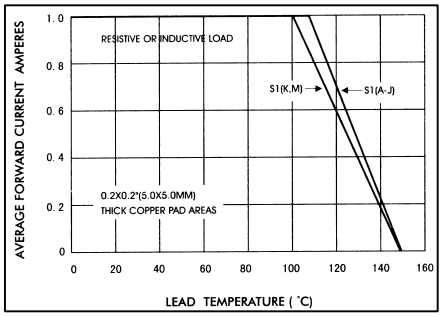


FIG.2-TYPICAL REVERSE CHARACTERISTICS

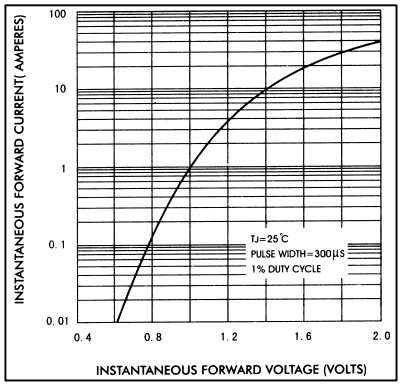


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

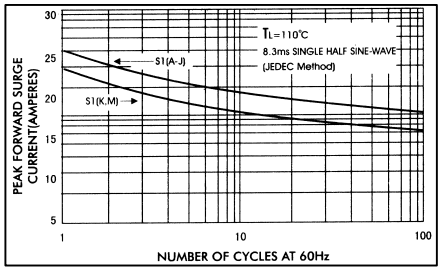


FIG.4-TYPICAL REVERSE CHARACTERISTICS

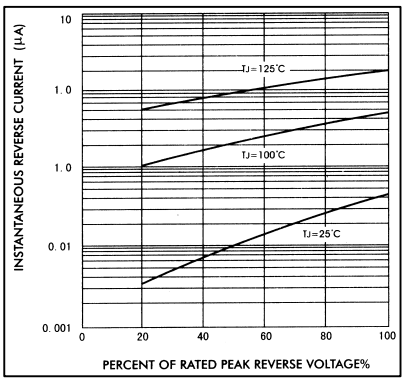


FIG.5-TYPICAL JUNCTION CAPACITANCE

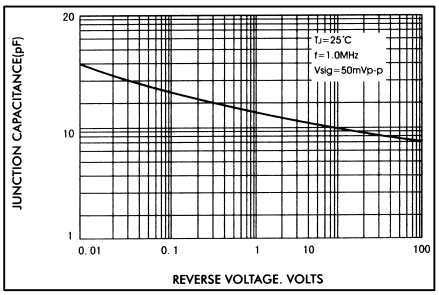


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE