

S1A THRU S1Y

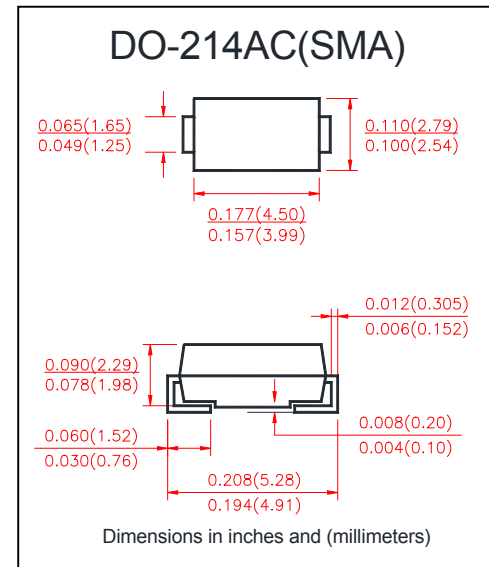
VOLTAGE RANGE 50 to 2000 Volts
CURRENT 1.0 Ampere

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°C/10 second at terminals

MECHANICAL DATA

- Case: JEDED SMA (DO-214AC) molded plastic
- Terminals: Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any



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	S1A	S1B	S1D	S1G	S1J	S1K	S1M	S1T	S1W	S1X	S1Y	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	1300	1600	1800	2000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	910	1120	1260	1400	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	1300	1600	1800	2000	Volts
Maximum Average Forward Rectified Current (see Fig. 1)	$I_{F(AV)}$	1											Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method) $T_c=90^\circ\text{C}$	I_{FSM}	30											Amps
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.1											Volts
Maximum DC Reverse Current at rated DC Blocking Voltage at	I_R	$T_A = 25^\circ\text{C}$	5										μA
		$T_A = 125^\circ\text{C}$	50										
Typical Junction Capacitance (NOTE 1)	$R_{\theta JA}$	50											$^\circ\text{C/W}$
		$R_{\theta JL}$	90										
Typical Thermal Resistance (NOTE 2)	t_{rr}	1500											nS
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150											$^\circ\text{C}$

Notes:

1. Thermal resistance from Junction to ambient and from junction to lead mounted on 0.2×0.2" (5.0 × 5.0mm) copper pad areas.
2. Reverse recovery test condition: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$



WEET Technology Company Limited

General Purpose Rectifiers

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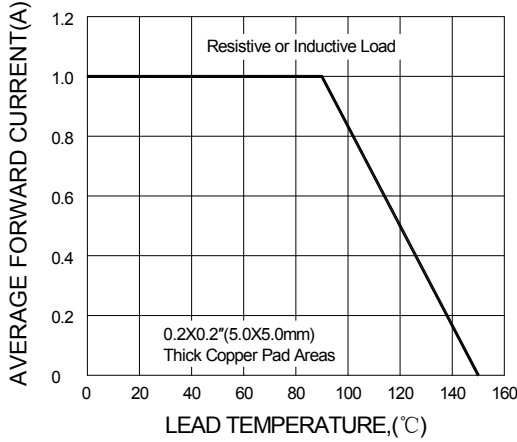
VOLTAGE RANGE

50 to 2000 Volts

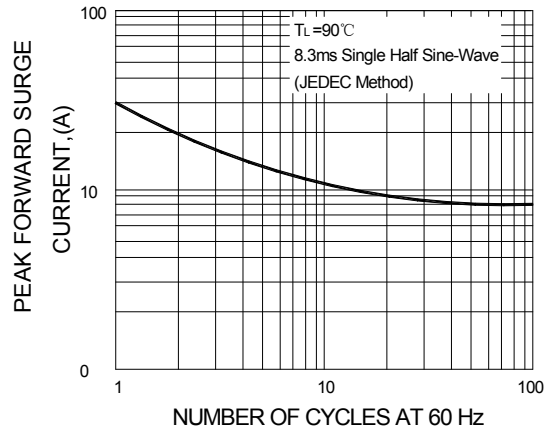
CURRENT

1.0 Ampere

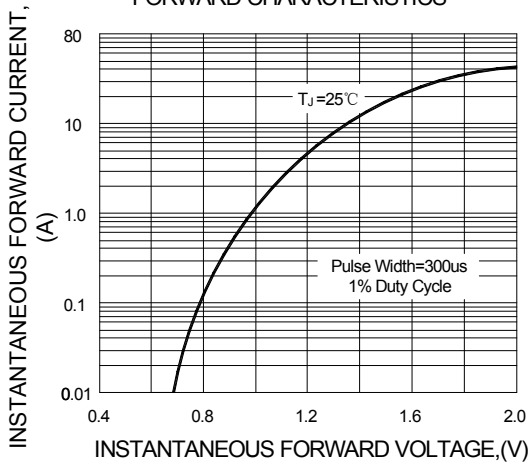
F1G.1-FORWARD CURRENT DERATING CURVE



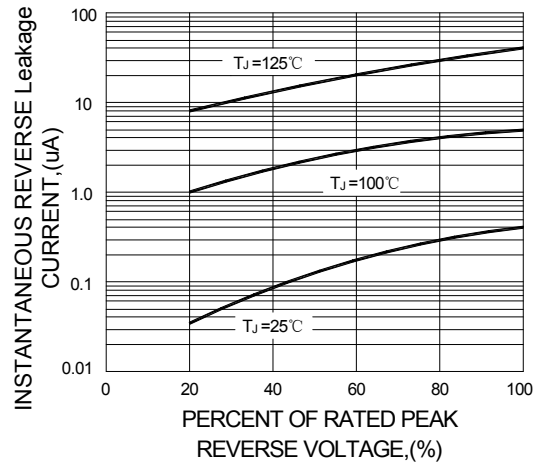
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



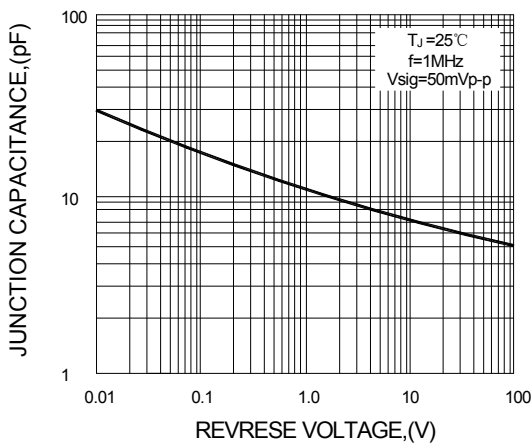
F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



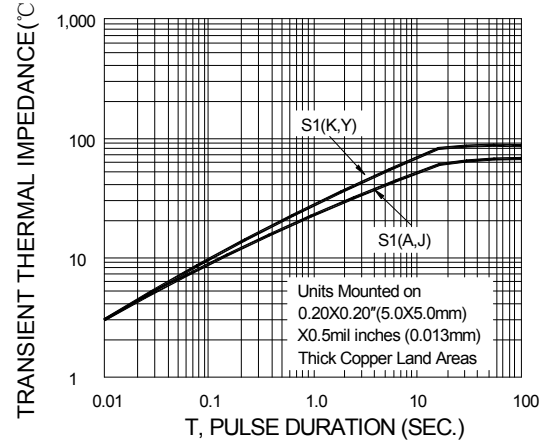
F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE



F1G.6-TRANSIENT THERMAL IMPEDANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.