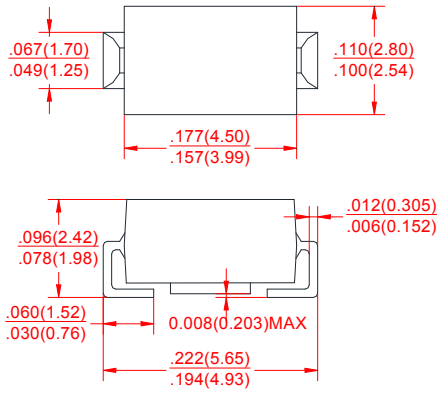
S1AE THRU S1YE

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℃/10 second at terminals

SMA(DO-214AC)



Dimensions in inches and (millimeters)

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

TYPE NUMBER	SYMBOLS	S1AE	S1BE	S1DE	S1GE	S1JE	S1KE	S1ME	S1TE	S1WE	S1XE	S1YE	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_L=90℃	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 T_A = 25℃	I_R	5											μA
Maximum DC Reverse Current at rated DC Blocking Voltage at T_A = 125℃	I_R	50											μA
Typical Junction Capacitance (NOTE 1)	$R_{\theta JA}$	50											℃/W
Typical Junction Capacitance (NOTE 1)	$R_{\theta JL}$	90											℃/W
Typical Thermal Resistance (NOTE 2)	t_{rr}	1500											nS
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150											℃

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=0.5A, I_R=1.0A, Irr=0.25A

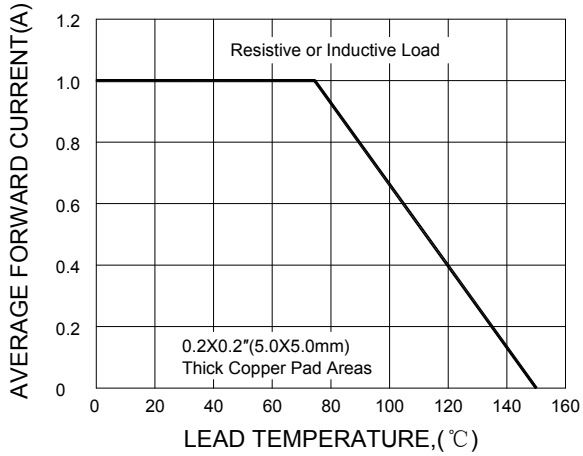
WEE Technology Company Limited

General Purpose Rectifiers

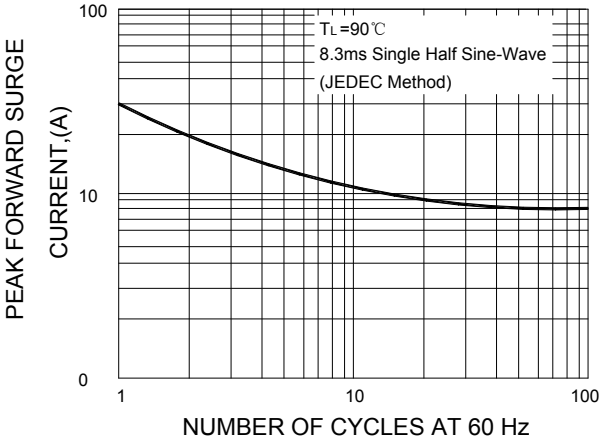
S1AE THRU S1YE

VOLTAGE RANGE	**50 to 2000 Volts**
CURRENT	**1.0 Ampere**

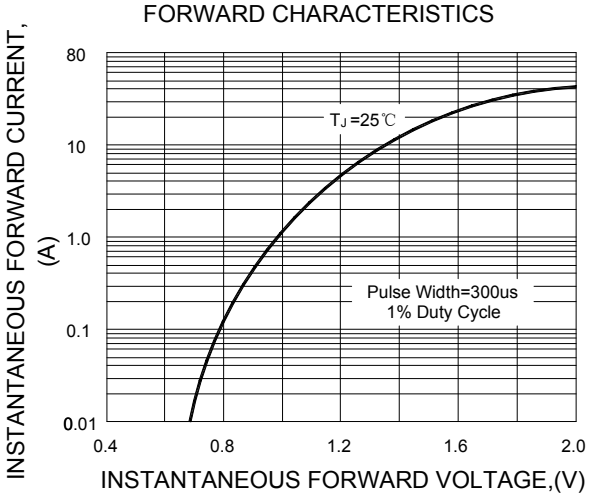
F1G.1-FORWARD CURRENT DERATING CURVE



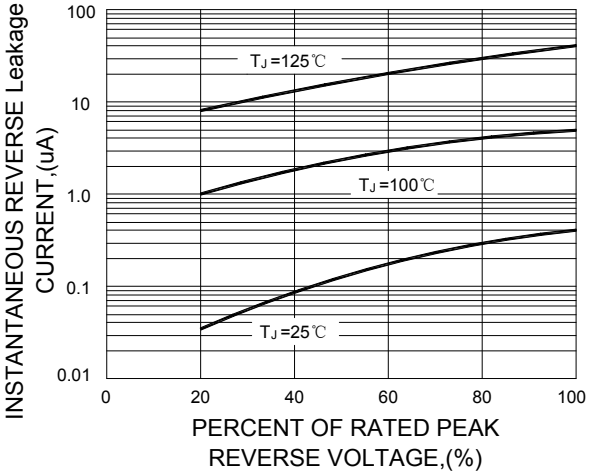
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



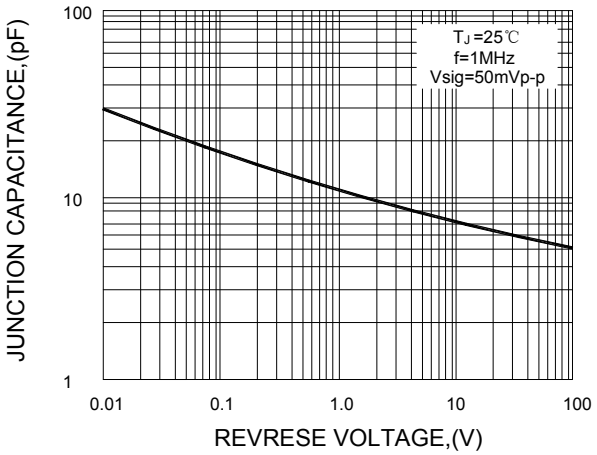
F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



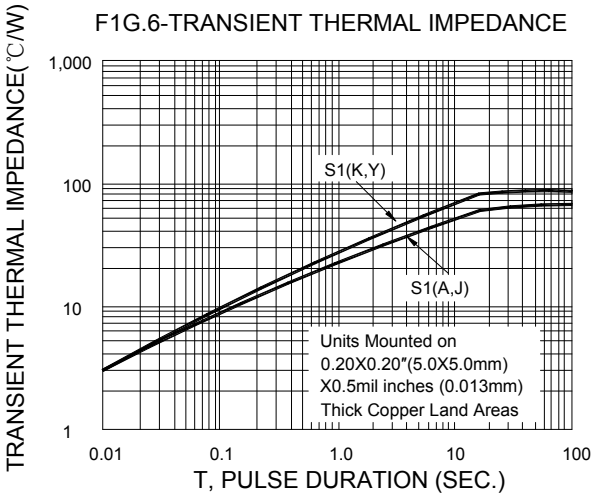
F1G.4-TYPICAL REVERSE CHARACTERISTICS



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.