

Surface Mount Schottky Rectifier SS24S

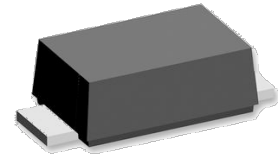
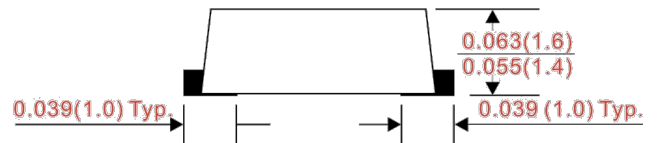
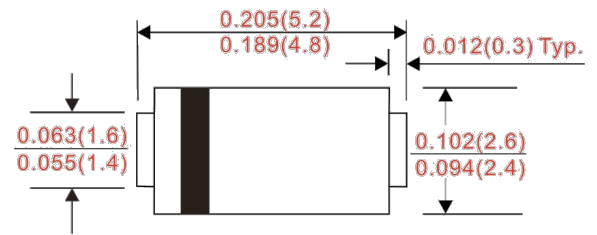
SMA-S

FEATURES

- Extremely Low VF
- Low Stored Charge, Majority Carrier Conduction
- Low Power Loss/High Efficiency
- Meet with RoHS compliance
- Lead free and Green device

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings (T_c=25°C unless otherwise noted)

Parameter	Symbol	SS24S	Unit
Maximum repetitive peak reverse voltage	VRRM	40	V
Working peak reverse voltage	VRWM	40	V
Maximum DC blocking voltage	VDC	40	V
Maximum average forward rectified current	IF(AV)	2	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	50	A
Operating junction temperature range	TJ	-55 to +125	°C
Storage temperature range	TSTG	-55 to +150	°C

Note:

- (1) Mounted on 30 mm x 30 mm Al P.C.B. with 50 mm x 25 mm x 100 mm fin heat sink
- (2) Free air, mounted on recommended copper pad area

Electrical characteristics (Tc=25°C unless otherwise noted)

Parameter	Symbol	Value		Unit
		Typical	Max	
Instantaneous forward voltage at IF=2A, Tj=25°C at IF=2A, Tj=125°C	VF	0.46 0.42	0.50	V
Maximum reverse current per leg at working peak reverse voltage Tj=100°C	IR	200		u'A
		50		u'A

Thermal characteristics (Tc=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Typical thermal resistance	RθJA	50	°C/W
	Rthjc	3	

Notes:

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
- (2) Pulse test: Pulse width ≤ 40 ms

RATINGS AND CHARACTERISTIC CURVES

FIG.1-Forward Derivative Curve

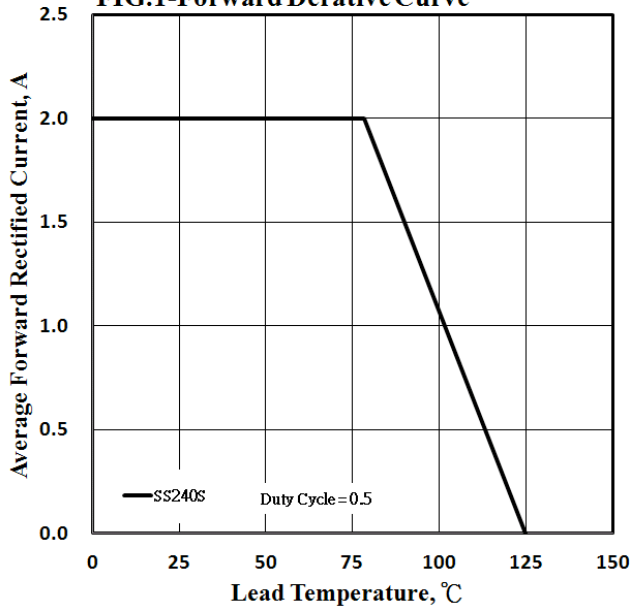


FIG.2-Max FWD Surge Current

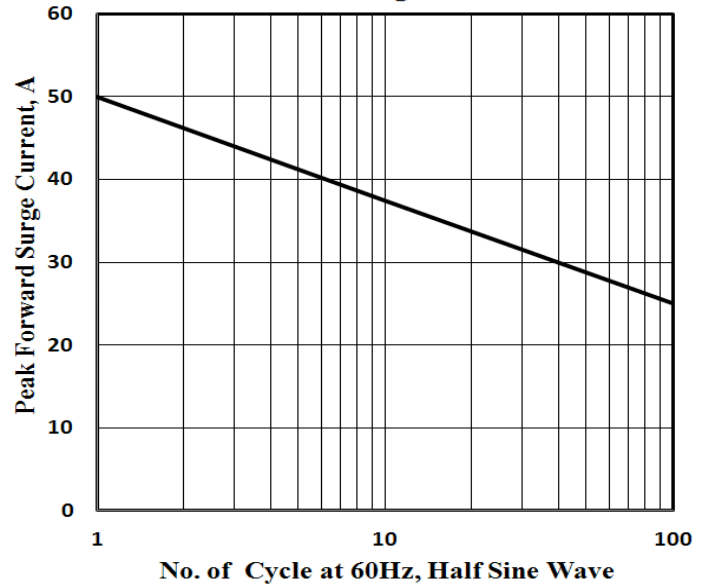


FIG.3-Typical Forward Characteristic Curve

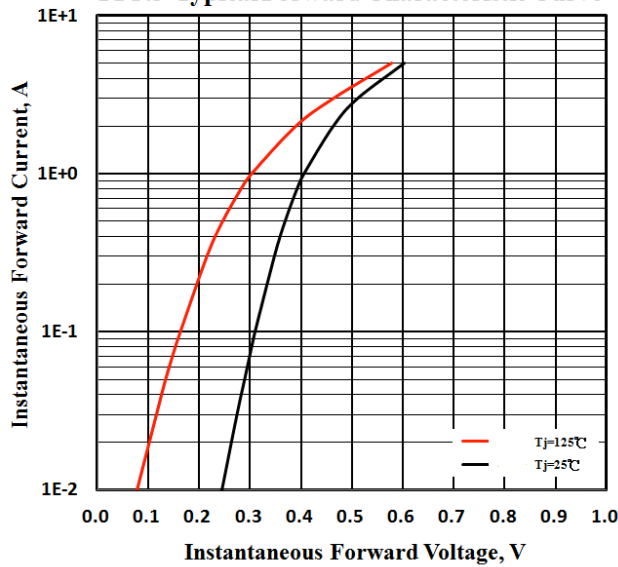


FIG.4-Typical Reverse Characteristic Curve

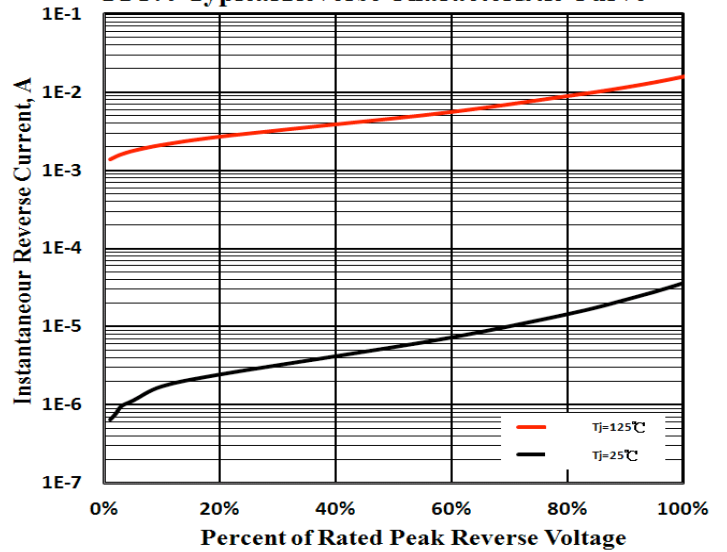


FIG.5-Typical Junction Capacitance

