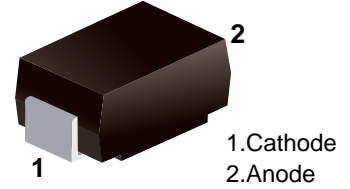


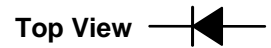
■ **Schottky Diodes**

■ **Features**

- Reverse Voltage - 20 to 200 V
- Forward Current - 3.0 A
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications



■ **Simplified outline(SMA)**



■ **Absolute 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	SS32	SS34	SS34A	SS36	SS38	SS310	SS312	SS315	SS320	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	45	60	80	100	120	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	31.5	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	45	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0									A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	80						70			A
Max Instantaneous Forward Voltage at 3 A	V_F	0.55	0.70			0.85		0.95			V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	I_R	0.5 5				0.3 3					mA
Typical Junction Capacitance ⁽¹⁾	C_j	450				400					pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	70									°C/W
Operating Junction Temperature Range	T_j	-55 ~ +125									°C
Storage Temperature Range	T_{stg}	-55 ~ +150									°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

■ **Marking**

NO.	SS32	SS34	SS36	SS38	SS310	SS312	SS315	SS320
Marking	SS32	SS34	SS36	SS38	SS310	SS312	SS315	SS320

Fig.1 Forward Current Derating Curve

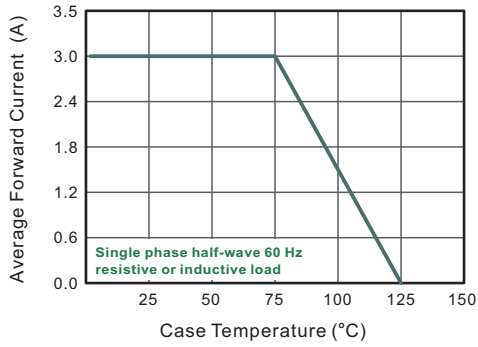


Fig.2 Typical Reverse Characteristics

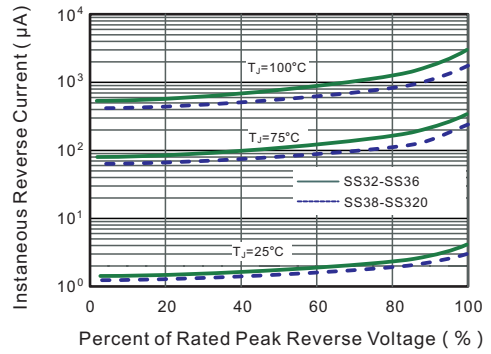


Fig.3 Typical Forward Characteristic

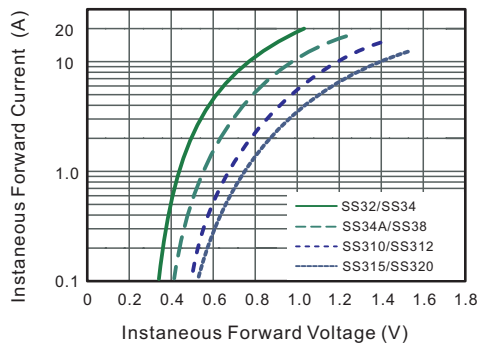


Fig.4 Typical Junction Capacitance

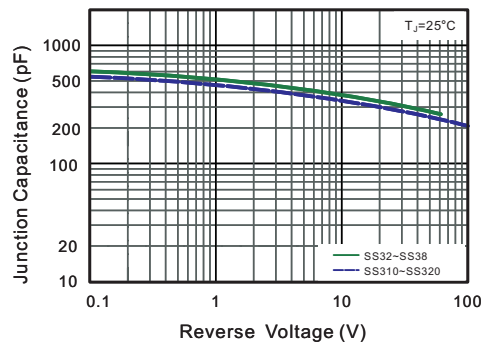


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

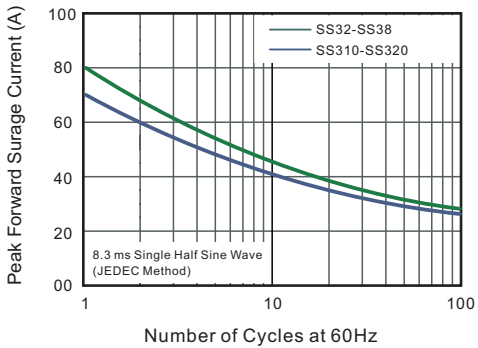
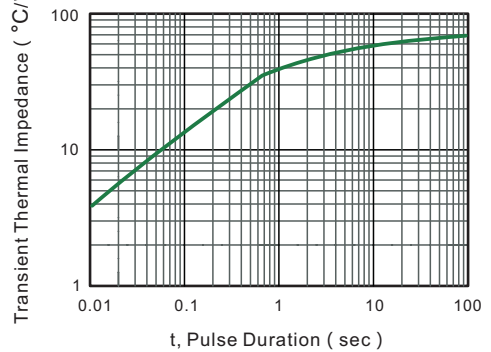
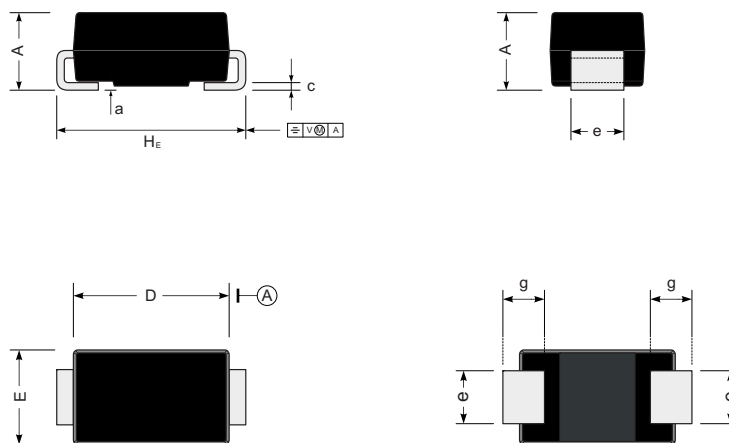


Fig.5- Typical Transient Thermal Impedance



■ SMA



UNIT		A	D	E	H _E	c	e	g	a
mm	max	2.2	4.5	2.7	5.2	0.31	1.6	1.5	0.3
	min	1.9	4.0	2.3	4.7	0.15	1.3	0.9	
mil	max	87	181	106	205	12	63	59	12
	min	75	157	91	185	6	51	35	

■ The recommended mounting pad size

