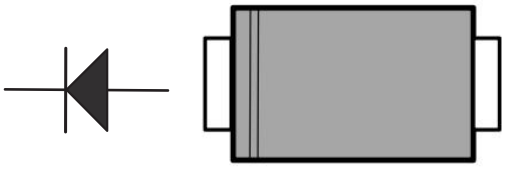
Surface Mount Schottky Barrier Rectifier

Parameter	Value	Unit
V_{RRM}	20~200	V
$I_{F(AV)}$	1.0	A



DO-214AC/SMA

Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability

Applications

- For use in low-voltage, high-frequency inverters, free-wheeling applications, DC/DC converters, and polarity protection circuits.

Absolute Maximum Ratings and Characteristics (at TJ = 25°C unless otherwise specified)

Parameter	Symbol	SS12A	SS14A	SS16A	SS18A	SS110A	SS112A	SS115A	SS120A	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0								A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30								A
Max Instantaneous Forward Voltage at 1A	V_F	0.55		0.70		0.85		0.90		V
Maximum DC Reverse Current Ta= 25°C at Rated DC Reverse Voltage Ta=100°C	I_R	0.3 10			0.2 5			0.1 2		mA
Typical Junction Capacitance(1)	C_j	110		80						pF
Typical Thermal Resistance(2)	$R_{\theta JA}$	90								°C/W
Operating Junction Temperature Range	T_j	-55 ~ +125		-55 ~ +150						°C
Storage Temperature Range	T_{stg}	-55 ~ +150								°C

Notes:

(1) Measured at1 MHz and applied reverse voltage of 4V D.C

(2) P.C.B. mounted with 2 .0" X 2 .0" (5 X 5 cm) copper pad areas

Typical characteristics

Fig.1 Forward Current Derating Curve

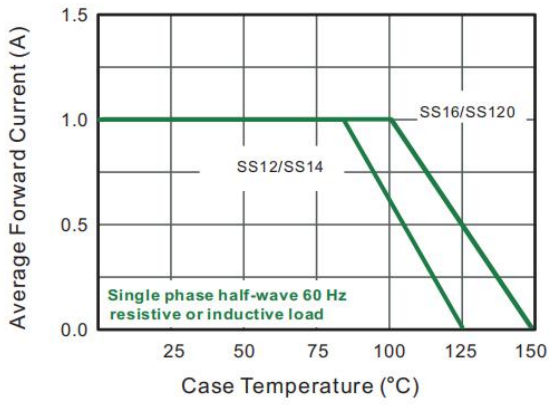


Fig.2 Typical Reverse Characteristics

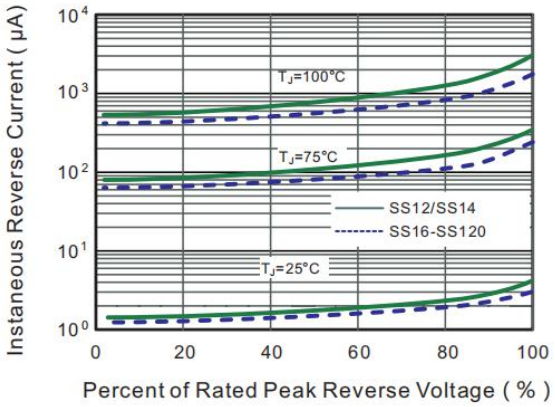


Fig.3 Typical Forward Characteristic

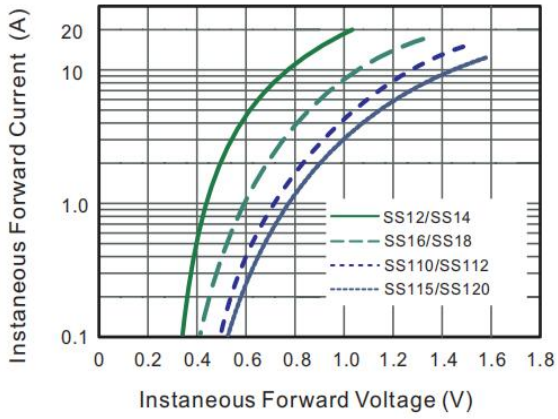


Fig.4 Typical Junction Capacitance

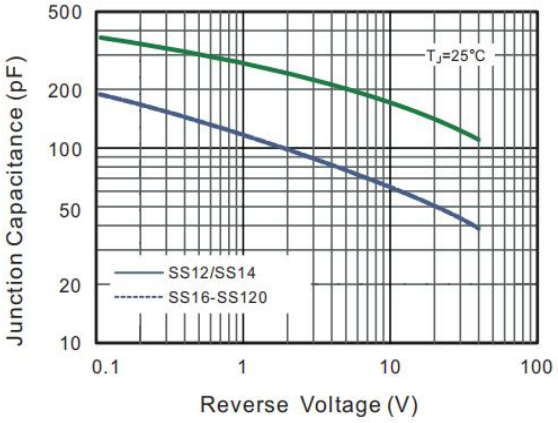


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

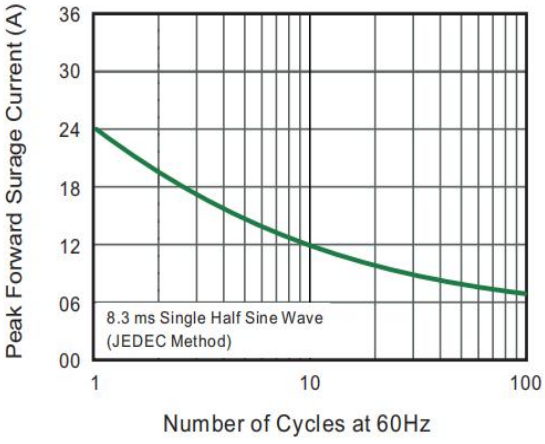
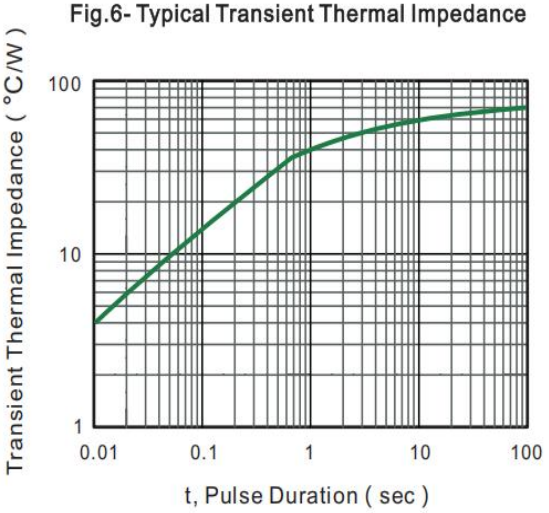


Fig.6- Typical Transient Thermal Impedance



Package outlines

Plastic surface mounted package; 2 leads

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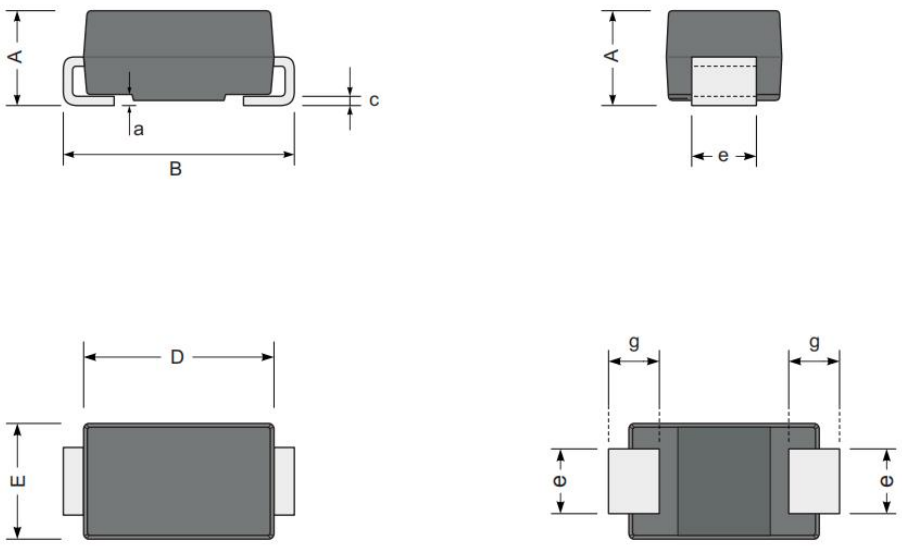
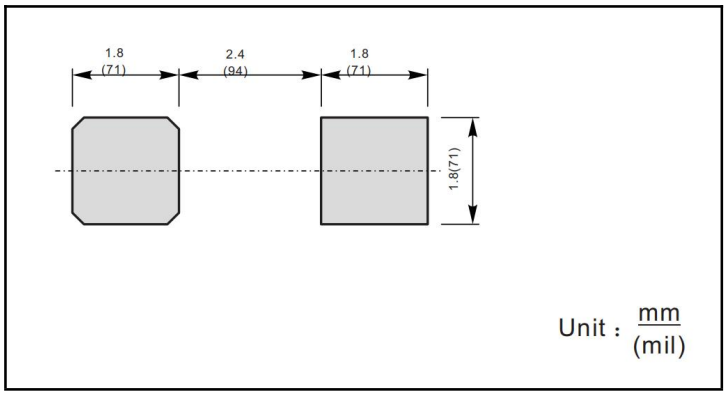


UNIT		A	D	E	B	c	e	g	a
mm	max	2.2	4.5	2.8	5.3	0.31	1.6	1.5	0.3
	min	1.9	4.0	2.4	4.8	0.15	1.3	0.9	
mil	max	87	181	110	209	12	63	59	12
	min	75	157	94	189	6	51	35	

The recommended mounting pad size



Marking

Type number	Marking code
SS12A	SS12
SS14A	SS14
SS16A	SS16
SS18A	SS18
SS110A	SS110
SS112A	SS112
SS115A	SS115
SS120A	SS120

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