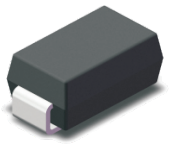
SSA32 - SSA320

Schottky Barrier Diode

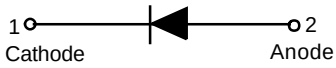
Features

- 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

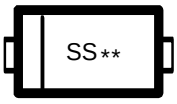
Schematic & PIN Configuration



SMA



Circuit



Marking

Absolute 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 by 20 %

Parameter	Symbols	SSA32	SSA34	SSA34A	SSA36	SSA38	SSA310	SSA312	SSA315	SSA320	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°C at Rated DC Reverse Voltage T_a =100°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.

Fig.1 Forward Current Derating Curve

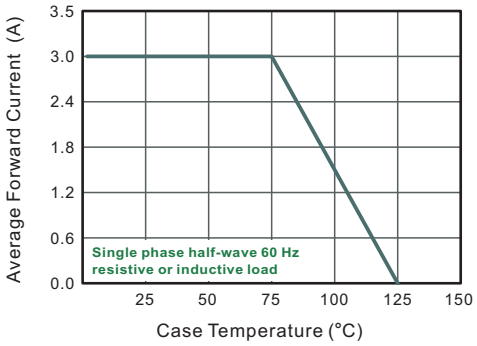


Fig.2 Typical Reverse Characteristics

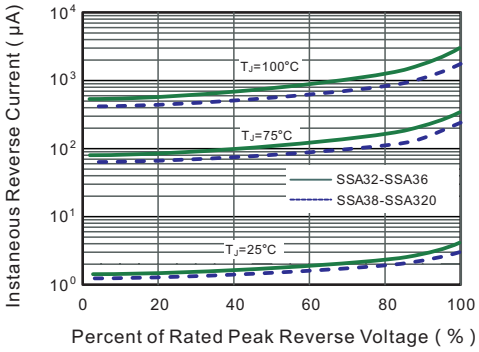


Fig.3 Typical Forward Characteristic

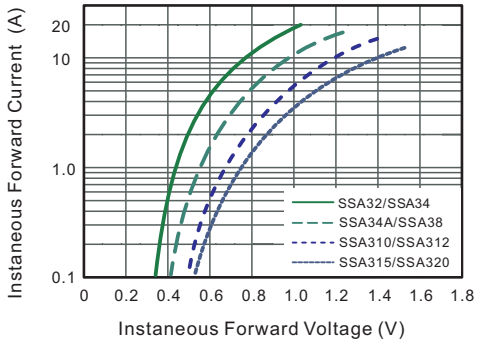


Fig.4 Typical Junction Capacitance

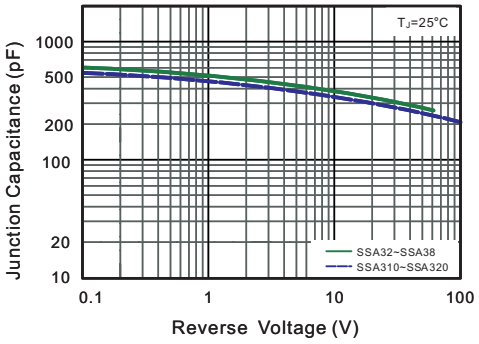


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

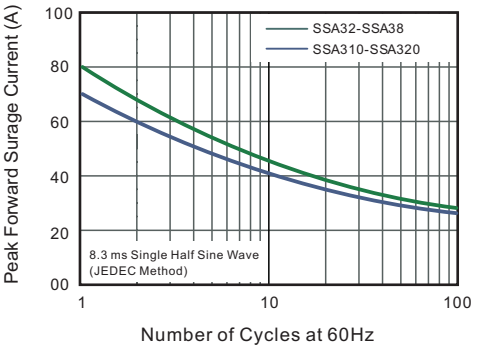
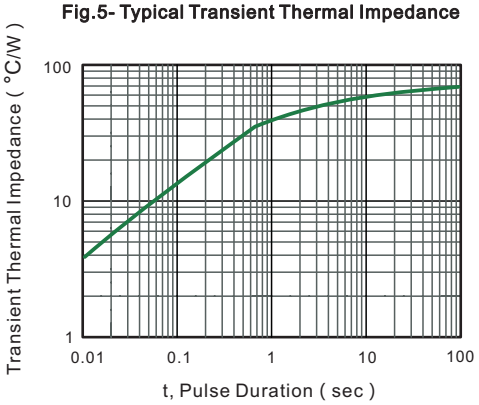
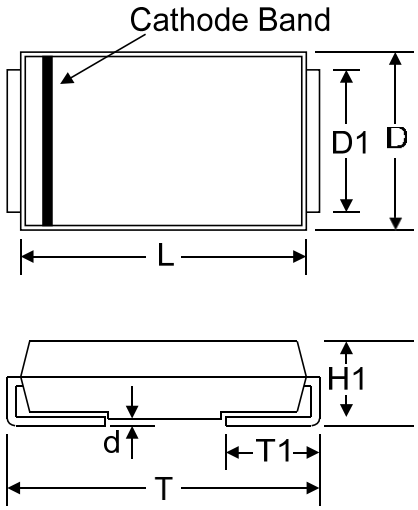


Fig.5- Typical Transient Thermal Impedance

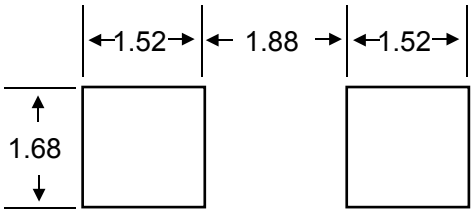


Outline Drawing – SMA(DO-214AC)



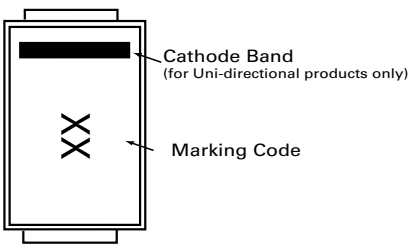
Dim	Millimeters		Inches	
	Min	Max	Min	Max
L	3.99	4.50	0.157	0.177
D	2.54	2.79	0.100	0.110
D1	1.25	1.65	0.049	0.065
T	4.93	5.28	0.194	0.208
T1	0.76	1.52	0.030	0.060
d	-	0.203	-	0.008
H1	1.98	2.29	0.078	0.090

Recommended Solder Pad Layout



Dimensions in mm

Part Marking System



Marking

Type number	Marking code
SSA32	SS32
SSA34	SS34
SSA34A	SS34A
SSA36	SS36
SSA38	SS38
SSA310	SS310
SSA312	SS312
SSA315	SS315
SSA320	SS320

Package Information

Package Type	Description	Quantity（pcs）	Standard
DO-214AC	Tape & Reel -12mm/13″ tape	5000	EIA-481-D