

Surface Mount Schottky Barrier

FEATURES

- Very low profile - typical height of 0.68mm
- Low power loss, high efficiency
- Ideal for automated placement
- Moisture sensitivity: level 1, per J-STD-020
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



Micro SMA



MECHANICAL DATA

Case : Micro SMA

Molding compound, UL flammability classification rating 94V-0
 Base P/N with suffix "G" on packing code - halogen-free, RoHS compliant
 Base P/N with prefix "H" on packing code - AEC-Q101 qualified

Terminal : Matte tin plated leads, solderable per JESD22-B102
 Meet JESD 201 class 1A whisker test,
 with prefix "H" on packing code meet JESD 201 class 2 whisker test

Polarity : Indicated by cathode band

Weight : 0.006 gram (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERSTICS (T _A =25℃ unless otherwise noted)						
PARAMETER	SYMBOL	SS13M	SS14M	SS16M		UNIT
Marking code		A	B	C		
Maximum repetitive peak reverse voltage	V _{RRM}	30	40	60		V
Maximum average forward rectified current	I _{F(AV)}	1				A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	25				A
Maximum instantaneous forward voltage (Note 1) @ 0.5A / TA=25 ℃ @ 0.5A / TA=125 ℃ @ 1.0A / TA=25 ℃ @ 1.0A / TA=125 ℃	V _F	TYP.	MAX.	TYP.	MAX.	V
		0.45	-	0.51	-	
		0.35	-	0.46	-	
		0.52	0.55	0.64	0.68	
		0.46	0.50	0.57	0.60	
Maximum reverse current @ rated VR @ TA=25 ℃ @ TA=125 ℃ @ TA=150 ℃	I _R	TYP.	MAX.	TYP.	MAX.	μA mA mA
		5	50	5	50	
		3	10	3	10	
		5.3	-	6.7	-	
Typical junction capacitance (Note 2)	C _j	50		40		pF
Typical thermal resistance	R _{θJL}	30				℃/W
	R _{θJC}	40				
	R _{θJA}	125				
Operating junction temperature range	T _J	-55 to + 150				℃
Storage temperature range	T _{STG}	-55 to + 150				℃

Note 1 : Pulse test with PW=300u sec, 1% duty cycle

Note 2: Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

ORDERING INFORMATION					
PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
SS1xM (Note 1)	Prefix "H"	RS	Suffix "G"	Micro SMA	1800 / 7" Plastic reel

Note 1: "x" defines voltage from 30V (SS13M) to 60V (SS16M)

EXAMPLE					
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
SS16M RSG	SS16M		RS	G	Green compound
SS16MHRS	SS16M	H	RS		AEC-Q101 qualified

RATINGS AND CHARACTERISTICS CURVES
(TA=25°C unless otherwise noted)

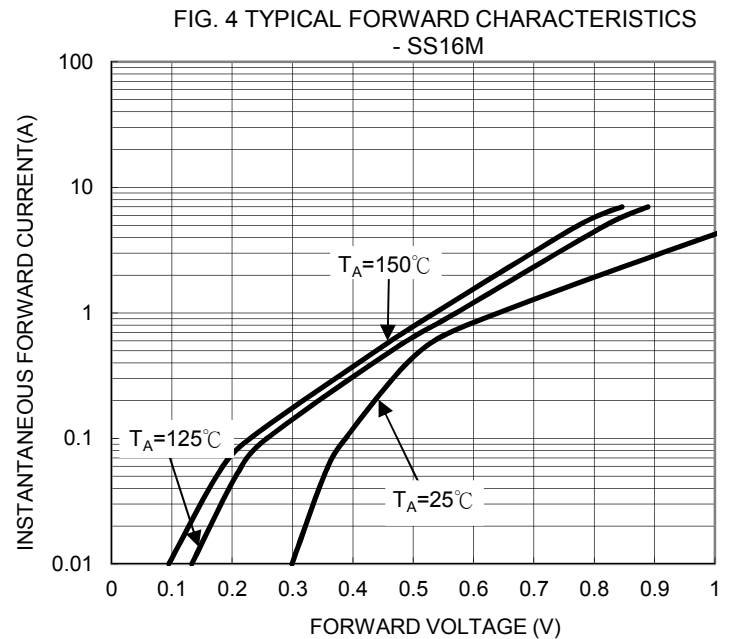
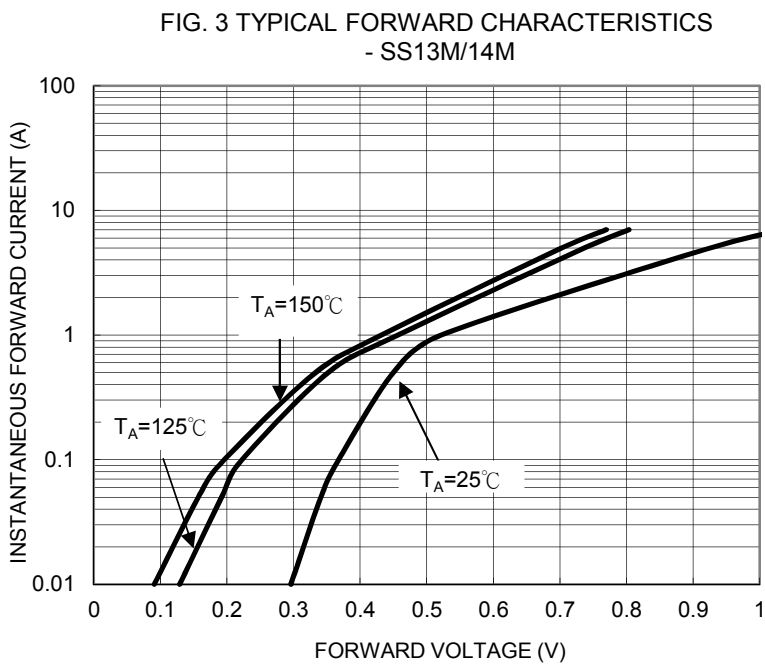
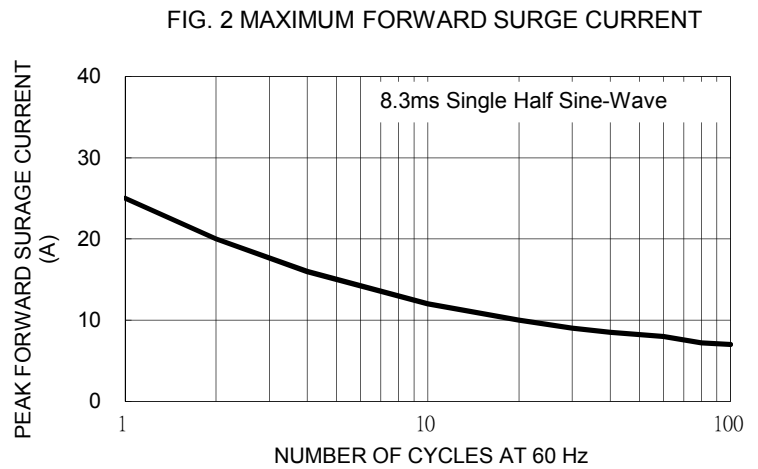
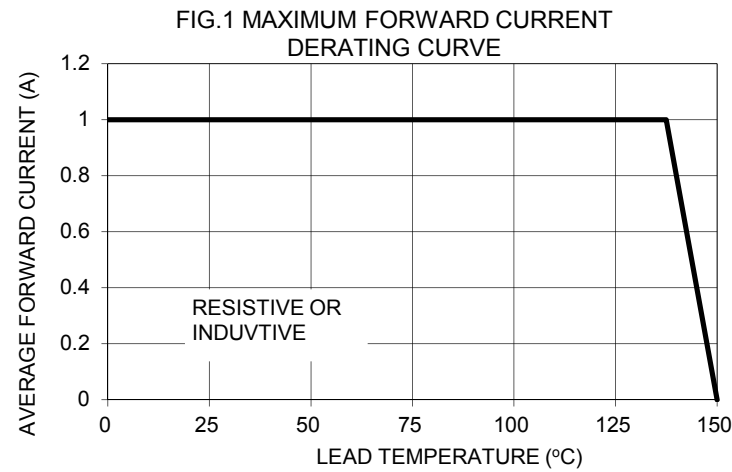


FIG. 5 TYPICAL REVERSE CHARACTERISTICS
- SS13M/14M

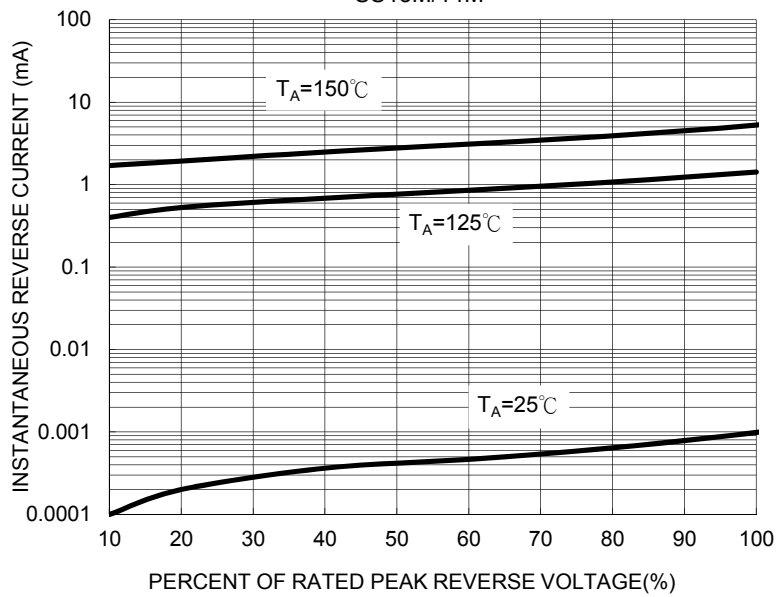


FIG. 6 TYPICAL REVERSE CHARACTERISTICS
- SS16M

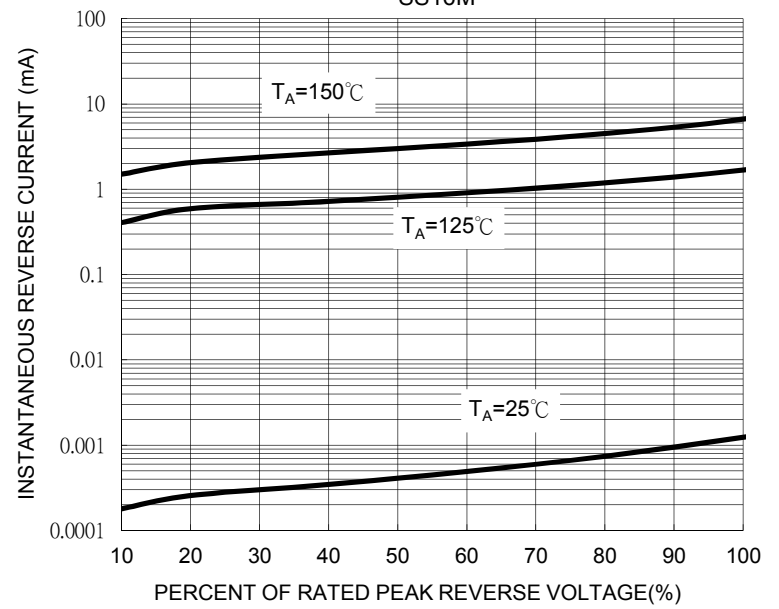


FIG. 7 TYPICAL JUNCTION CAPACITANCE

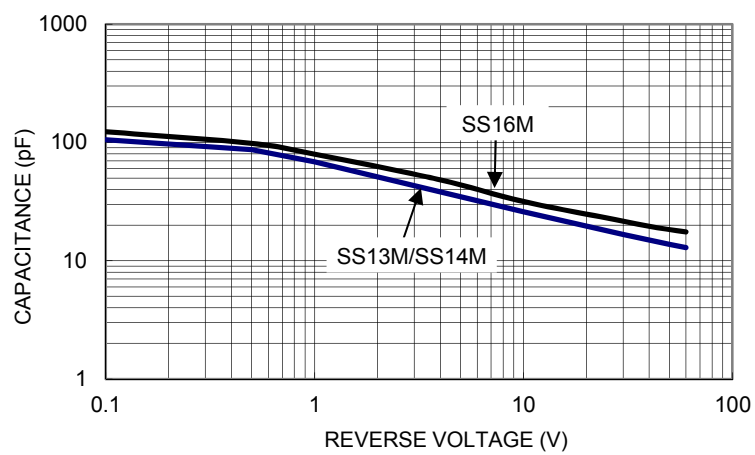
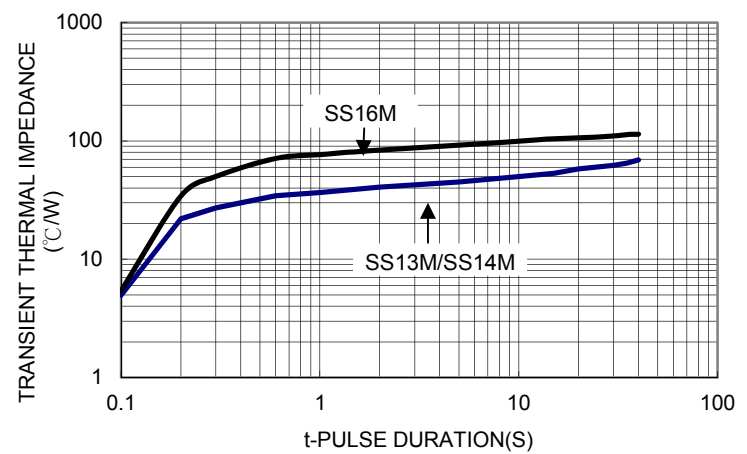
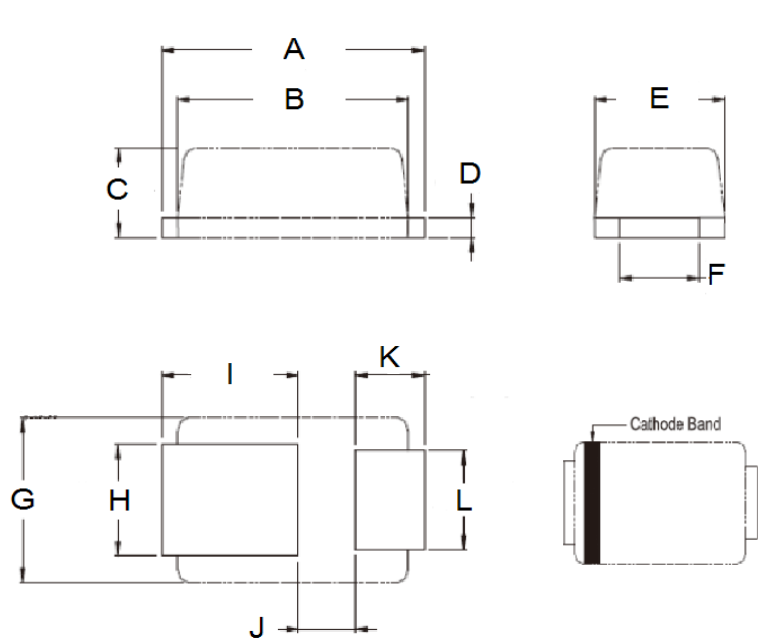


FIG. 8 TYPICAL TRANSIENT THERMAL IMPEDANCE

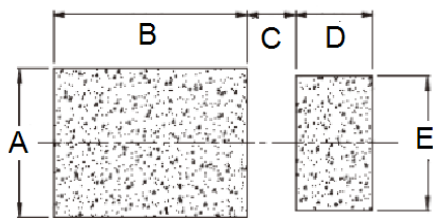


PACKAGE OUTLINE DIMENSIONS



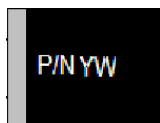
DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	2.30	2.70	0.091	0.106
B	2.10	2.30	0.083	0.091
C	0.63	0.73	0.025	0.029
D	0.10	0.20	0.004	0.008
E	1.15	1.35	0.045	0.053
F	0.65	0.85	0.026	0.034
G	1.15	1.35	0.045	0.053
H	0.75	0.95	0.030	0.037
I	1.10	1.50	0.043	0.059
J	0.55	0.75	0.022	0.030
K	0.55	0.75	0.022	0.030
L	0.65	0.85	0.026	0.034

SUGGESTED PAD LAYOUT



Symbol	Unit(mm)
A	1.1
B	2
C	0.5
D	0.8
E	1

MARKING DIAGRAM



P/N = Marking code
YW = Date Code