

Surface Mount Schottky Barrier Rectifier

FEATURES

- Low power loss, high efficiency
- Ideal for automated placement
- Guardring for overvoltage protection
- High surge current capability
- Moisture sensitivity level: 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



DO-214AC (SMA)





MECHANICAL DATA

Case: DO-214AC (SMA)

Molding compound, UL flammability classification rating 94V-0 Base P/N with suffix "G" on packing code - halogen-free 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:** 0.066 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARA	TOTE EXTENSION (1	1	1
PARAMETER	SYMBOL	SSL12	SSL13	SSL14	UNIT
Marking Code		SL12	SL13	SL14	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC blocking voltage	V _{DC}	20	30	40	V
Maximum average forward rectified current	I _{F(AV)}	1		Α	
eak forward surge current, 8.3 ms single half sine-wave uperimposed on rated load			А		
Maximum instantaneous forward voltage (Note 1) @ 1 A	V _F		0.39		V
Maximum reverse current @ rated VR T _J =25 ℃	,	0.2		mA	
T _J =100°C	I _R	50			
Typical thermal resistance	R _{θJL} R _{θJA}	28 88		°C/W	
Operating junction temperature range	TJ	- 55 to +125		оС	
Storage temperature range	T _{STG}	- 55 to +150			οС

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



ORDERING INFORMATION					
PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING
	QUALIFIED		CODE		
SSL1x (Note 1) Prefix		R3	Suffix "G"	SMA	1,800 / 7" Plastic reel
		R2		SMA	7,500 / 13" Paper reel
	Drofiv "L"	M2		SMA	7,500 / 13" Plastic reel
	гіенх п	F3		Folded SMA	1,800 / 7" Plastic reel
		F2		Folded SMA	7,500 / 13" Paper reel
		F4		Folded SMA	7,500 / 13" Plastic reel

Note 1: "x" defines voltage from 20V (SSL12) to 40V (SSL14)

EXAMPLE					
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
SSL14 R3	SSL14		R3		
SSL14 R3G	SSL14		R3	G	Green compound
SSL14HR3	SSL14	Н	R3		AEC-Q101 qualified

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

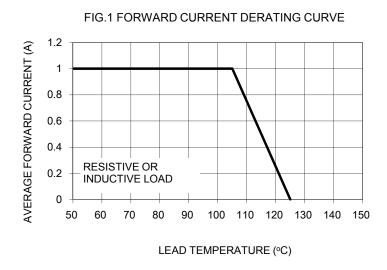


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

50

8.3ms Single Half Sine-Wave

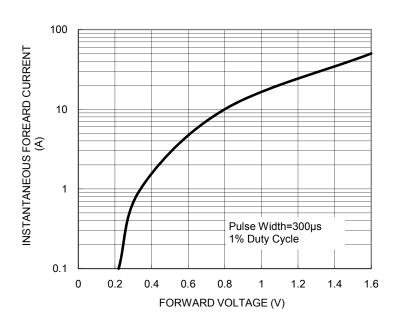
10

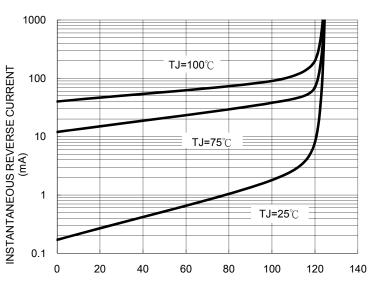
10

NUMBER OF CYCLES AT 60 Hz

FIG. 4 TYPICAL RERVERSE CHARACTERISTICS

FIG. 3 TYPICAL FORWARD CHARACTERISTICS

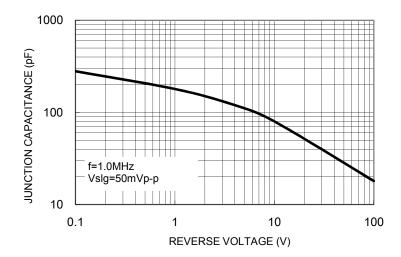




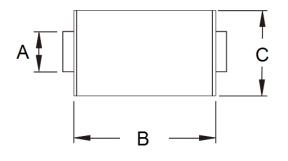
PERCENT OF RATED PEAK REVERSE VOLTAGE.(%)

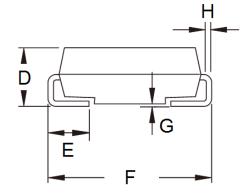


FIG. 5 TYPICAL JUNCTION CAPACITANCE



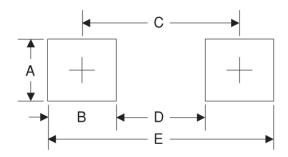
PACKAGE OUTLINE DIMENSIONS





DIM.	Unit (mm)		Unit (inch)	
DIIVI.	Min	Max	Min	Max
Α	1.27	1.58	0.050	0.062
В	4.06	4.60	0.160	0.181
С	2.29	2.83	0.090	0.111
D	1.99	2.50	0.078	0.098
Е	0.90	1.41	0.035	0.056
F	4.95	5.33	0.195	0.210
G	0.10	0.20	0.004	0.008
Н	0.15	0.31	0.006	0.012

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
Α	1.68	0.066
В	1.52	0.060
С	3.93	0.155
D	2.41	0.095
E	5.45	0.215

MARKING DIAGRAM



P/N = Marking Code
G = Green Compound
YW = Date Code
F = Factory Code





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