

Schottky Barrier Rectifier

FEATURES

- Low forward voltage drop
- Low power loss, high efficiency
- Guardring for overvoltage protection
- High surge current capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition

MECHANICAL DATA

Case: DO-204AL (DO-41)

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - green compound (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 **Weight:** 0.33g (approximately)





DO-204AL (DO-41)

		SR	SR	SR	SR	SR	SR	SR	SR	UNIT
PARAMETER	SYMBOL	102	103	104	105	106	109	110	115	
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	90	100	150	V
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	63	70	105	V
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	90	100	150	V
Maximum average forward rectified current	I _{F(AV)}	1						А		
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	30					A			
Maximum instantaneous forward voltage (Note 1) @ 1 A	V _F	0.55 0.70		70	0.	85	0.95	V		
Maximum reverse current @ rated VR T ₁ =25 °C		0.5 0.1								
T _J =100℃	I _R		10		į	5 -			mA	
T 」=125 ℃			-			_		2		
Voltage rate of change (Rated V _R)	dV/dt	10000			V/µs					
Typical thermal resistance	R _{θJA}	90			^o C/W					
Operating junction temperature range	TJ	- {	- 55 to +125 - 55 to +150			°C				
Storage temperature range	T _{STG}	- 55 to +150					ос			

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



SR102 thru SR115

Taiwan Semiconductor

ORDERING INFORMATION						
PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING	
	QUALIFIED		CODE			
	Prefix "H"	A0		DO-41	3,000 / Ammo box (52mm taping)	
SR1xx (Note 1)		R0	Suffix "G"	DO-41	5,000 / 13" Paper reel	
		R1	Suillx G	DO-41	5,000 / 13" Paper reel (Reverse)	
		B0		DO-41	1,000 / Bulk packing	

Note 1: "xx" defines voltage from 20V (SR102) to 150V (SR115)

EXAMPLE

PREFERRED P/N	PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	DESCRIPTION	
	_	QUALIFIED		CODE		
SR106 A0	SR106		A0			
SR106 A0G	SR106		A0	G	Green compound	
SR106HA0	SR106	Н	A0		AEC-Q101 qualified	

RATINGS AND CHARACTERISTICS CURVES

(TA=25 $^{\circ}$ C unless otherwise noted)

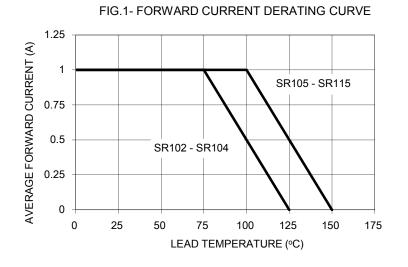


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

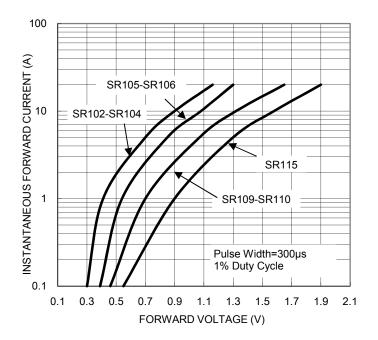
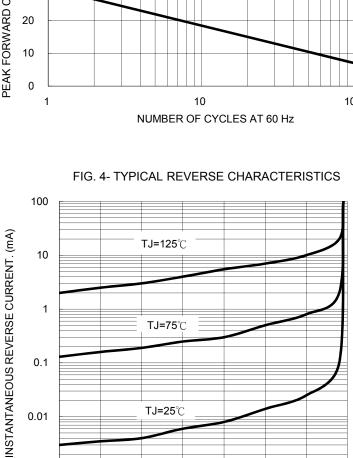
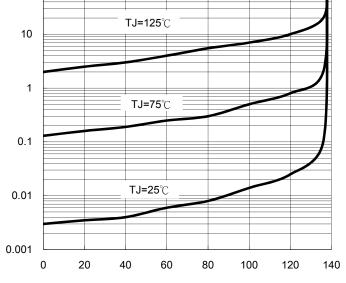


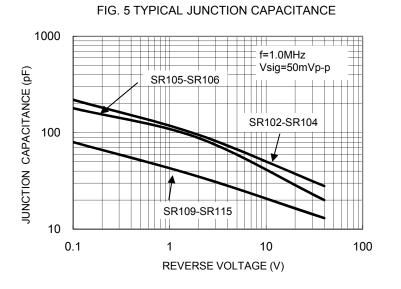
FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT 50 PEAK FORWARD CURRENT (A) 40 30 20 10 0 1 10 100 NUMBER OF CYCLES AT 60 Hz

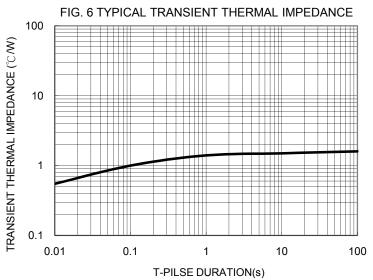




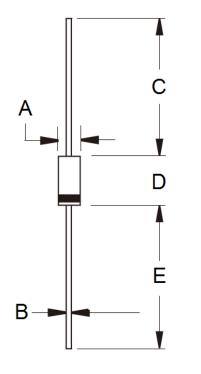
PERCENT OF RATED PEAK REVERSE VOLTAGE.(%)





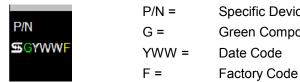


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit	(mm)	Unit (inch)			
Diwi.	Min	Max	Min	Max		
А	2.00	2.70	0.079	0.106		
В	0.71	0.86	0.028	0.034		
С	25.40	-	1.000	-		
D	4.20	5.20	0.165	0.205		
E	25.40	-	1.000	-		

MARKING DIAGRAM



Specific Device Code Green Compound

Document Number: D1308011



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