

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-201AD

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

Weight: 1.1 g (approximately)



DO-201AD

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)											
PARAMETER	SYMBOL	SR 802	SR 803	SR 804	SR 805	SR 806	SR 809	SR 810	SR 815	SR 820	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	90	100	150	200	V
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	63	70	105	140	V
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	90	100	150	200	V
Maximum average forward rectified current	I _{F(AV)}	8						А			
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	150						А			
Maximum instantaneous forward voltage (Note 1) @ 8 A	V _F	0.55 0.70 0.92 1.02			02	v					
Maximum reverse current @ rated VR T,=25 °C		0.5 0.1									
T _J =100℃	I _R	15			10			-		mA	
T _J =125 ℃						5					
Voltage rate of change (Rated V _R)	dV/dt	10000						V/µs			
Typical thermal resistance	R _{θJA}	40							°C/W		
Operating junction temperature range	TJ	- 55 to +125 - 55 to +150						°C			
Storage temperature range	T _{STG}	- 55 to +150						°C			
Nate 4. Delas teste ille DIM/ 000es 40/ slate scale											•

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



SR802 thru SR820

Taiwan Semiconductor

ORDERING INFORMATION							
PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING		
	QUALIFIED		CODE				
SR8xx (Note 1)	Prefix "H"	A0	Suffix "G"	DO-201AD	500 / Ammo box		
		R0		DO-201AD	1,250 / 13" Paper reel		
		B0		DO-201AD	500 / Bulk packing		
		X0		DO-201AD	Forming		

Note 1: "xx" defines voltage from 20V (SR802) to 200V (SR820)

EXAMPLE								
PREFERRED P/N		AEC-Q101	PACKING CODE	GREEN COMPOUND	DESCRIPTION			
	PART NO.	QUALIFIED	I AORINO OODE	CODE				
SR806 A0	SR806		A0					
SR806 A0G	SR806		A0	G	Green compound			
SR806HA0	SR806	Н	A0		AEC-Q101 qualified			

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

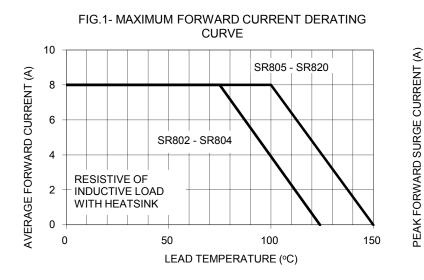
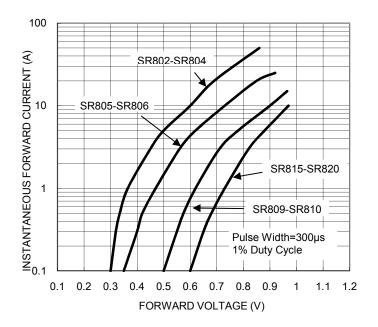


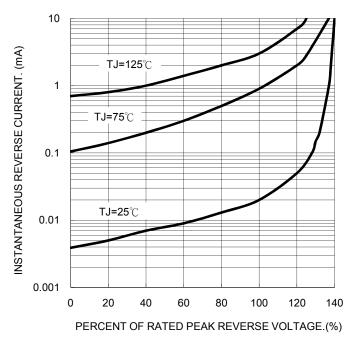
FIG. 3- TYPICAL FORWARD CHARACTERISTICS



SURGE CURRENT 175 8.3ms Single Half Sine Wave JEDEC Method 150 125 100 75 50 25 10 100 1 NUMBER OF CYCLES AT 60 Hz

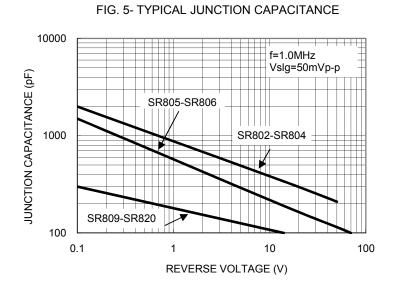
FIG. 2- MAXIMUM NON-REPETITIVE FORWARD

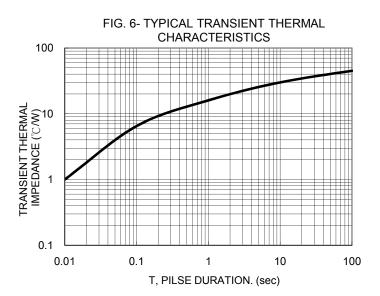
FIG. 4- TYPICAL REVERSE CHARACTERISTICS



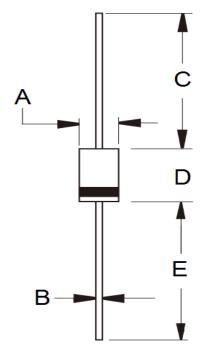
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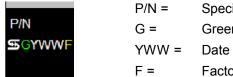


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit	(mm)	Unit (inch)			
	Min	Max	Min	Max		
Α	5.00	5.60	0.197	0.220		
В	1.20	1.30	0.048	0.052		
С	25.40	-	1.000	-		
D	8.50	9.50	0.335	0.375		
Е	25.40	-	1.000	-		

MARKING DIAGRAM



Specific Device Code Green Compound Date Code Factory Code

Document Number: DS_D1309011



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