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# **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** 





PARAMETER	SYMBOL	SR1202	SR1203	SR1204	UNIT
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 <sub>F(AV)</sub>	12			Α
Repetitive peak forward current f > 15Hz	I <sub>FRM</sub>	55			Α
Peak forward surge current, 50/60 Hz single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	280 / 320			А
Rating for fusing t < 10ms	l <sup>2</sup> t	390			A <sup>2</sup> s
Maximum instantaneous forward voltage @5 A (Note 1) @12 A	V <sub>F</sub>	0.45 0.55			V
Maximum DC reverse current @T <sub>J</sub> =25 ℃	I <sub>R</sub>	500			μA
at rated DC blocking voltage $@T_J=100 \degree$	'R	20			mA
<del>-</del> : 10	$R_{ heta JL}$	3			°C/W
Typical thermal resistance	$R_{ hetaJA}$	24			
Junction temperature range	TJ	- 50 to + 150		°C	
- in DC forward mode		<=200			
Storage temperature range	T <sub>STG</sub>		- 55 to + 175	οС	

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

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ORDERING INFORMATION					
PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING
	QUALIFIED		CODE		
SR12xx (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 (SR1202) to 40V (SR1204)

EXAMPLE						
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND	DESCRIPTION	
SR1204 A0	SR1204		A0			
SR1204 A0G	SR1204		A0	G	Green compound	
SR1204HA0	SR1204	Н	A0		AEC-Q101 qualified	

### **RATINGS AND CHARACTERISTICS CURVES**

(TA=25°C unless otherwise noted)



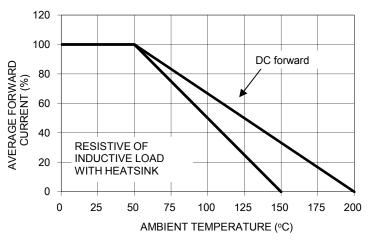
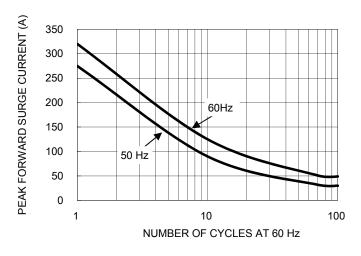
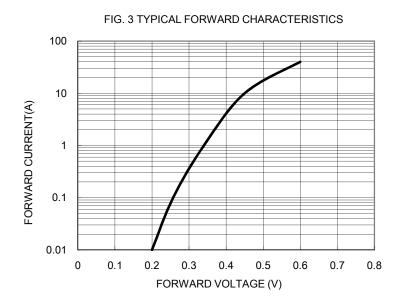
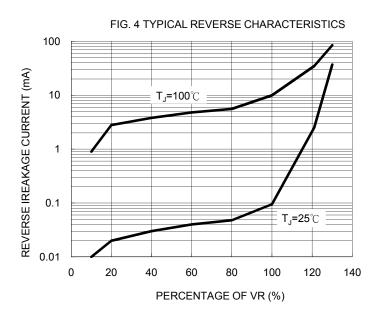


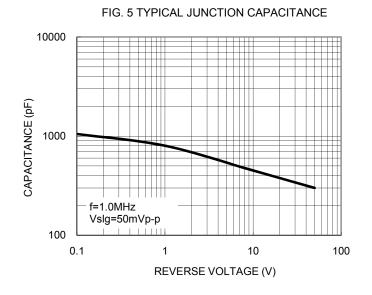
FIG. 2 MAXIMUM FORWARD SURGE CURRENT

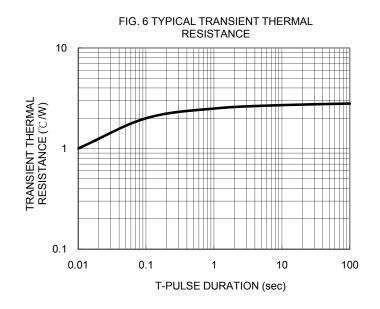




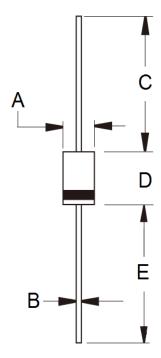








### PACKAGE OUTLINE DIMENSIONS



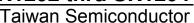
DIM.	Unit	(mm)	Unit (inch)		
	Min	Max	Min	Max	
Α	5.00	5.60	0.197	0.220	
В	1.20	1.30	0.048	0.052	
С	25.40	-	1.000	-	
D	8.50	9.50	0.335	0.375	
E	25.40	-	1.000	-	

#### **MARKING DIAGRAM**



P/N = Specific Device Code
G = Green Compound

YWW = Date Code F = Factory Code





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