

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: 1.1g (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHA	RACTERIS	TICS	(T _A =25	5°C unl	ess oth	nerwise	noted)			
PARAMETER	SYMBOL	SR 302	SR 303	SR 304	SR 305	SR 306	SR 309	SR 310	SR 315	SR 320	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)}	3						Α			
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	80					Α				
Maximum instantaneous forward voltage (Note 1) @ 3 A	V _F	0.55		0.	70	0.	85	0.9	95	V	
Maximum reverse current @ rated VR T _J =25 ℃		0.5 0.1									
T _J =100°C	I _R	10		5		-			mA		
T _J =125 ℃			-		-			2			
Voltage rate of change (Rated V _R)	dV/dt	10000				V/µs					
Typical thermal resistance	R _{θJC} R _{θJA}	15 50				°C/W					
Operating junction temperature range	T _J	- 55 to +125 - 55 to +150						οС			
Storage temperature range	T _{STG}	- 55 to +150					оС				

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				
SR3xx (Note 1) Prefix "H"		A0		DO-201AD	500 / Ammo box		
	Drofiv "⊔"	R0	Suffix "G"	DO-201AD	1,250 / 13" Paper reel		
	B0 X0	В0	Sullix G	DO-201AD	500 / Bulk packing		
		X0		DO-201AD	Forming		

Note 1: "xx" defines voltage from 20V (SR302) to 200V (SR320)

EXAMPLE								
PREFERRED P/N	PART NO.	AEC-Q101	PACKING CODE GREEN COMPOUND		DESCRIPTION			
	TAKT NO.	QUALIFIED	THORING GODE	CODE	BESOKII TION			
SR306 A0	SR306		A0					
SR306 A0G	SR306		A0	G	Green compound			
SR306HA0	SR306	Н	A0		AEC-Q101 qualified			

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)



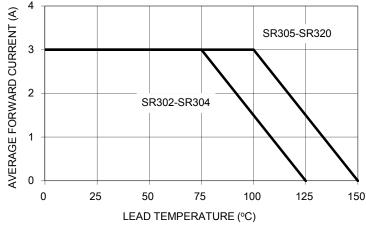


FIG. 2 MAXIMUM FORWARD SURGE CURRENT

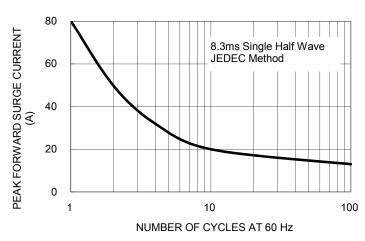


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

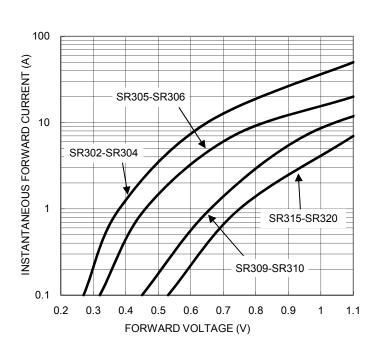
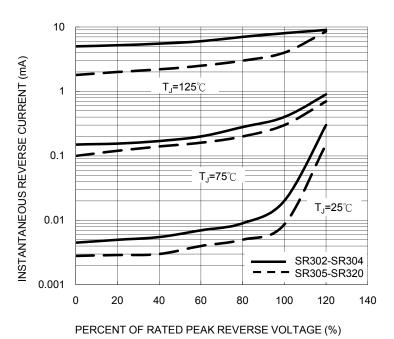


FIG. 4 TYPICAL REVERSE CHARACTERISTICS



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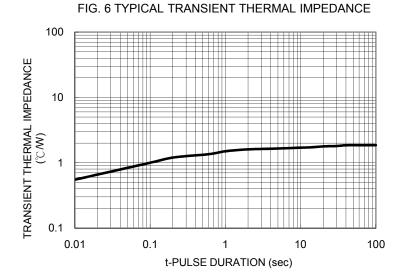
FIG. 5 TYPICAL JUNCTION CAPACITANCE

1000
SR302-SR304
SR302-SR304

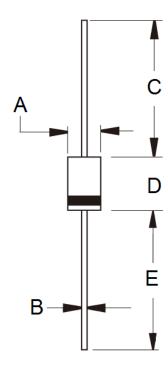
100
SR315SR320
SR305-SR306

f=1.0MHz
Vslg=50mVp-p

1
0.1
1
1
0.1
1
10
100
REVERSE VOLTAGE (V)



PACKAGE OUTLINE DIMENSIONS



DIM.	Unit	(mm)	Unit (inch)			
DIIVI.	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



P/N = Specific Device Code G = Green Compound

YWW = Date Code F = Factory Code

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