



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







DO-204AC (DO-15)

MECHANICAL DATA

Case: DO-204AC (DO-15)

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: 0.4g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)											
PARAMETER	SYMBOL	SR 202	SR 203	SR 204	SR 205	SR 206	SR 209	SR 210	SR 215	SR 220	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)}	2						Α			
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	50						А			
Maximum instantaneous forward voltage (Note 1) @ 2 A	V _F		0.55		0.	70	0.	85	0.	95	V
Maximum reverse current @ rated VR T _J =25 °C		0.5 0.1									
T _J =100 °C	I _R		10		5			-		mA	
T _J =125 °C			-			_		2	2		
Voltage rate of change (Rated V_R)	dV/dt	10000						V/µs			
Typical thermal resistance	$egin{array}{c} {\sf R}_{ heta {\sf JC}} \ {\sf R}_{ heta {\sf JL}} \ {\sf R}_{ heta {\sf JA}} \end{array}$	14 21.7 75						°C/W			
Operating junction temperature range	T _J	- 5	- 55 to +125 - 55 to +150				оС				
Storage temperature range	T _{STG}	- 55 to +150						οС			

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

Document Number: DS_D1408018



ORDERING INFORMATION							
PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING		
	QUALIFIED		CODE				
0.000		A0		DO-15	1,500 / Ammo box		
SR2xx (Note 1)	Prefix "H"	R0	Suffix "G"	DO-15	3,500 / 13" Paper reel		
		В0		DO-15	1,000 / Bulk packing		

Note 1: "xx" defines voltage from 20V (SR202) to 200V (SR220)

EXAMPLE								
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION			
SR206 A0	SR206		A0					
SR206 A0G	SR206		A0	G	Green compound			
SR206HA0	SR206	Н	A0		AEC-Q101 qualified			

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG.1- FORWARD CURRENT DERATING CURVE

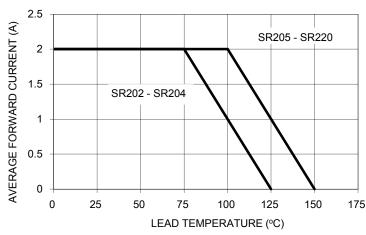


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

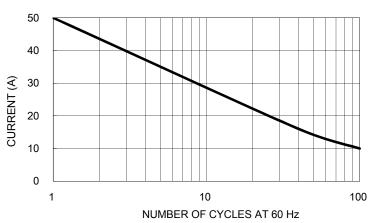


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

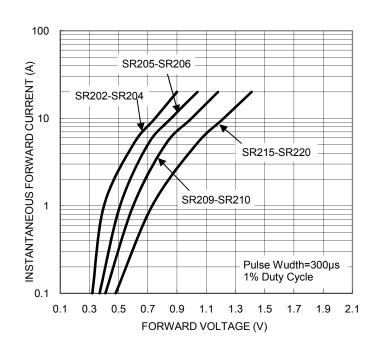


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

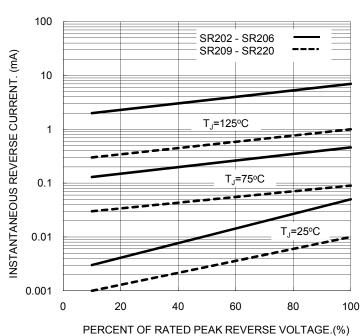


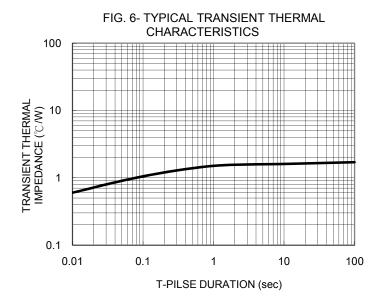


FIG. 5- TYPICAL JUNCTION CAPACITANCE

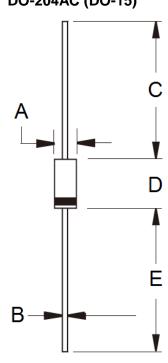
1000
SR205-SR206
SR202-SR204
SR202-SR204

f=1.0MHz
Vsig=50mVp-p

10
0.1
1
10
100
REVERSE VOLTAGE (V)



PACKAGE OUTLINE DIMENSIONS DO-204AC (DO-15)



DIM.	Unit	(mm)	Unit (inch)			
DIIVI.	Min	Max	Min	Max		
Α	2.60	3.60	0.102	0.142		
В	0.70	0.90	0.028	0.035		
С	25.40	-	1.000	-		
D	5.80	7.60	0.228	0.299		
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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Document Number: DS_D1408018 Version: I14

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