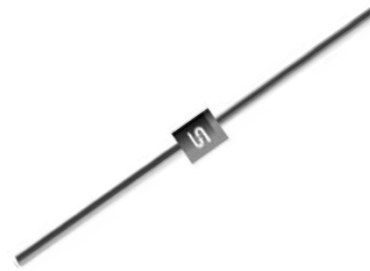


## Schottky Barrier Rectifier

### 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 <sub>A</sub> =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 <sub>RRM</sub>	20	30	40	50	60	90	100	150	200	V	
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	63	70	105	140	V	
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	90	100	150	200	V	
Maximum average forward rectified current	I <sub>F(AV)</sub>	2									A	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	50									A	
Maximum instantaneous forward voltage (Note 1) @ 2 A	V <sub>F</sub>	0.55			0.70		0.85		0.95		V	
Maximum reverse current @ rated VR T <sub>J</sub> =25 °C T <sub>J</sub> =100 °C T <sub>J</sub> =125 °C	I <sub>R</sub>	0.5					0.1					mA
		10			5		-					
		-			-		2					
Voltage rate of change (Rated V <sub>R</sub> )	dV/dt	10000									V/μs	
Typical thermal resistance	R <sub>θJC</sub>	14									°C/W	
	R <sub>θJL</sub>	21.7										
	R <sub>θJA</sub>	75										
Operating junction temperature range	T <sub>J</sub>	- 55 to +125					- 55 to +150					°C
Storage temperature range	T <sub>STG</sub>	- 55 to +150									°C	

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

ORDERING INFORMATION					
PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
SR2xx (Note 1)	Prefix "H"	A0	Suffix "G"	DO-15	1,500 / Ammo box
		R0		DO-15	3,500 / 13" Paper reel
		B0		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	H	A0		AEC-Q101 qualified

**RATINGS AND CHARACTERISTICS CURVES**

(TA=25°C unless otherwise noted)

FIG. 1- FORWARD CURRENT DERATING CURVE

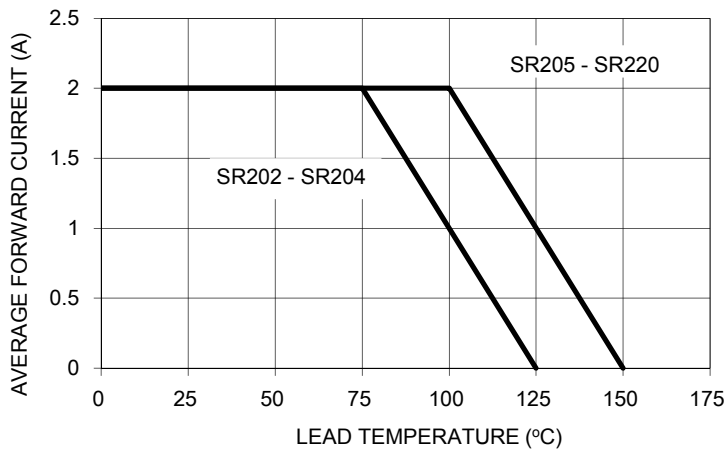


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

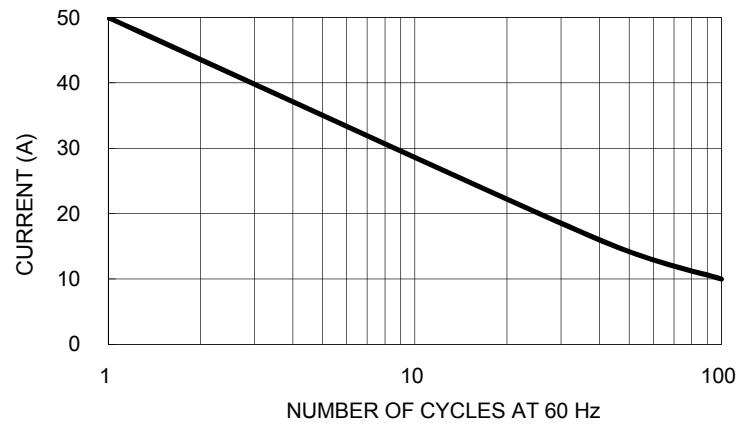


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

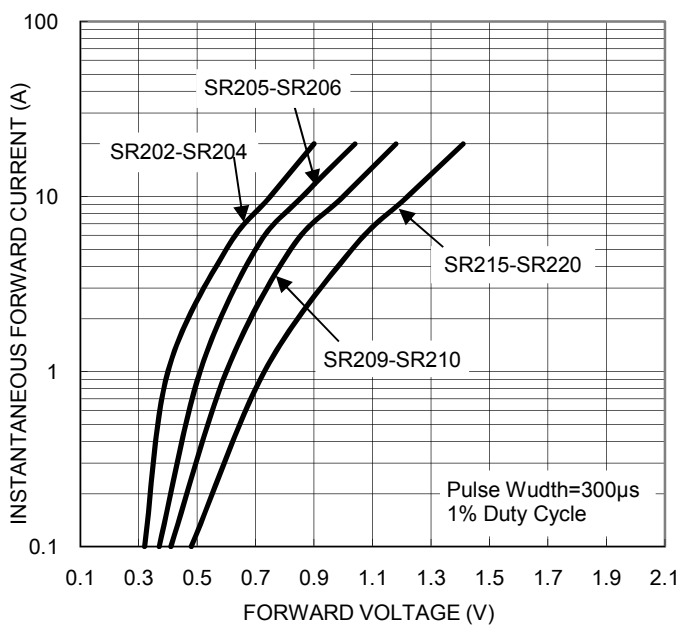


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

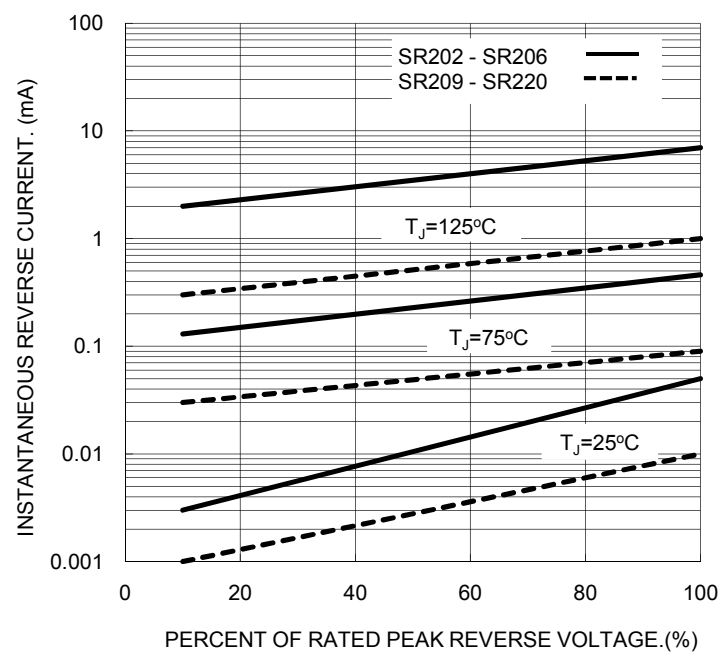


FIG. 5- TYPICAL JUNCTION CAPACITANCE

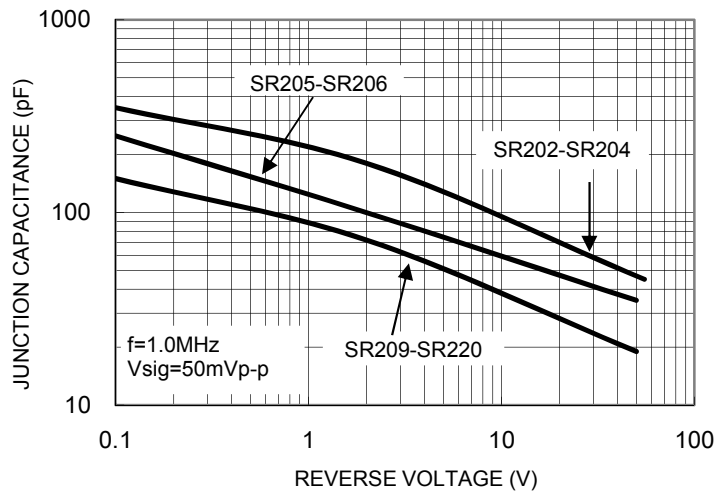
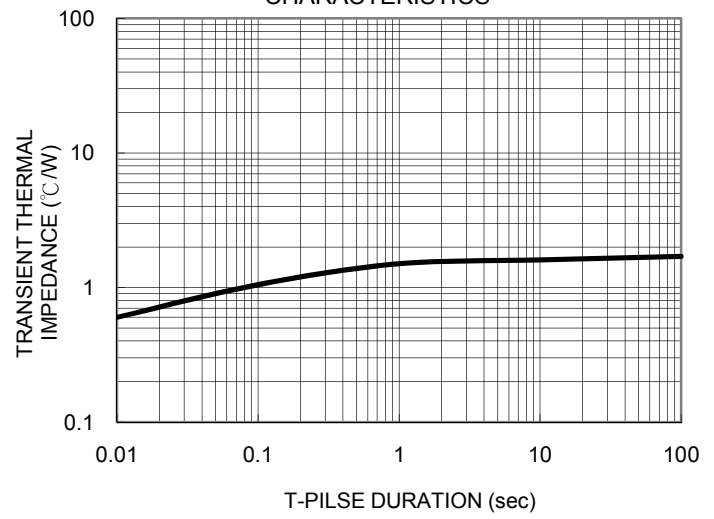
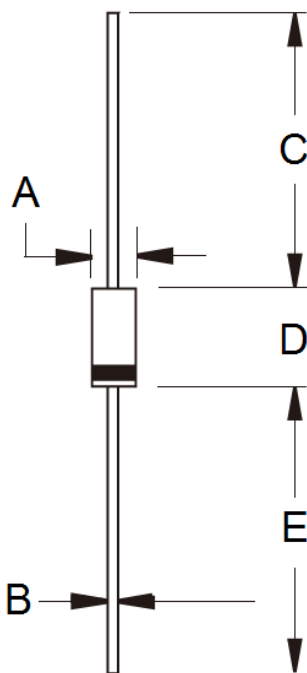


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



PACKAGE OUTLINE DIMENSIONS

DO-204AC (DO-15)



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.60	3.60	0.102	0.142
B	0.70	0.90	0.028	0.035
C	25.40	-	1.000	-
D	5.80	7.60	0.228	0.299
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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