

2A, 20V - 200V Schottky Barrier Rectifiers

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



MECHANICAL DATA

Case: DO-204AC (DO-15)

Molding compound, UL flammability classification rating 94V-0

Part no. with suffix "H" means AEC-Q101 qualified

Packing code with suffix "G" means green compound (halogen-free)

Terminal: Pure tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

Weight: 0.4g (approximately)

DO-204AC (DO-15)

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									A	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	50									A	
Maximum instantaneous forward voltage (Note 1) @ 2 A	V _F	0.55			0.70		0.85		0.95		V	
Maximum reverse current @ rated V _R	I _R	0.5					0.1					mA
		10			5		-					
		-			-		2					
Voltage rate of change (Rated V _R)	dV/dt	10000									V/μs	
Typical thermal resistance	R _{θJC}	14.0									°C/W	
	R _{θJL}	21.7										
	R _{θJA}	75.0										
Operating junction temperature range	T _J	- 55 to +125				- 55 to +150						°C
Storage temperature range	T _{STG}	- 55 to +150									°C	

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

ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX (*)	PACKAGE	PACKING
SR2xx (Note 1)	H	A0	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)

*: Optional available

EXAMPLE					
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
SR206HA0G	SR206	H	A0	G	AEC-Q101 qualified Green compound

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG. 1- FORWARD CURRENT DERATING CURVE

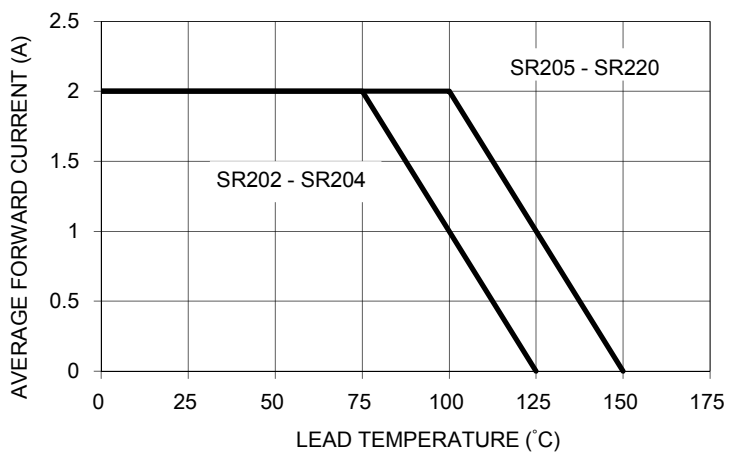


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

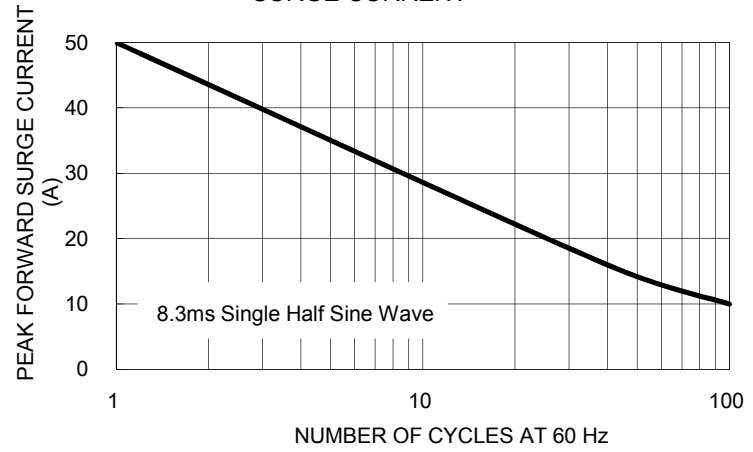


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

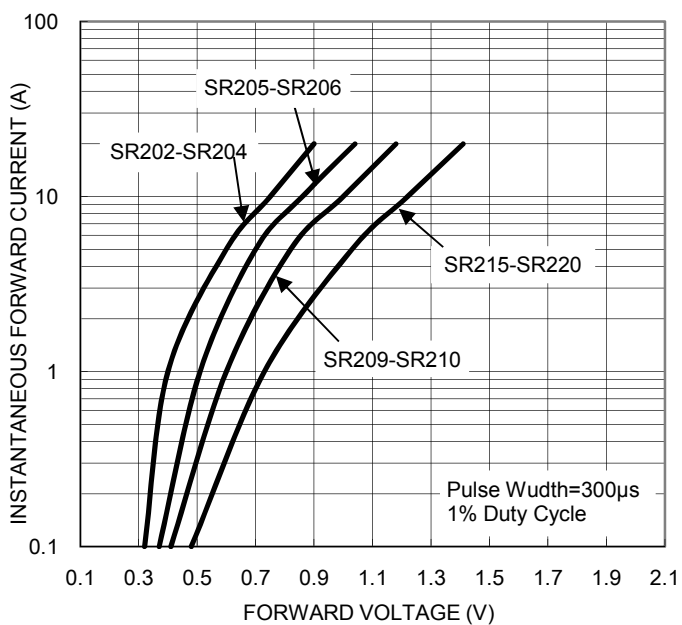


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

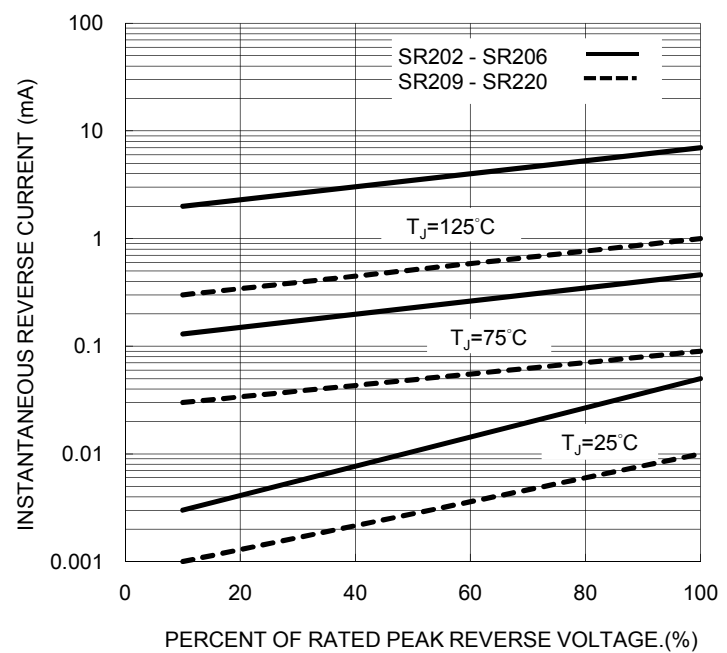


FIG. 5- TYPICAL JUNCTION CAPACITANCE

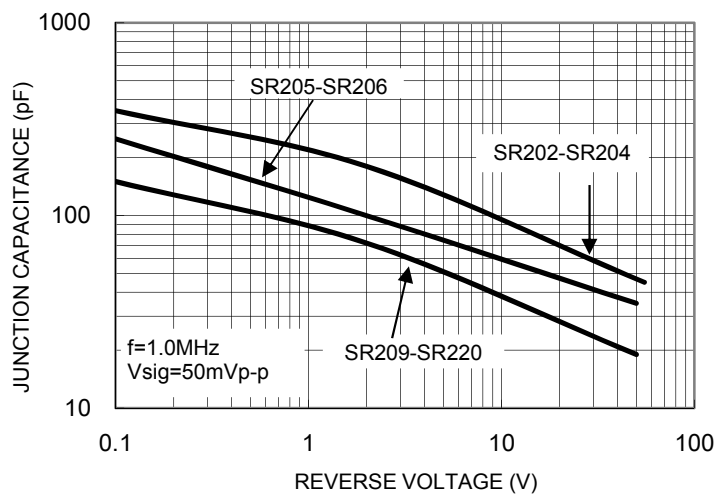
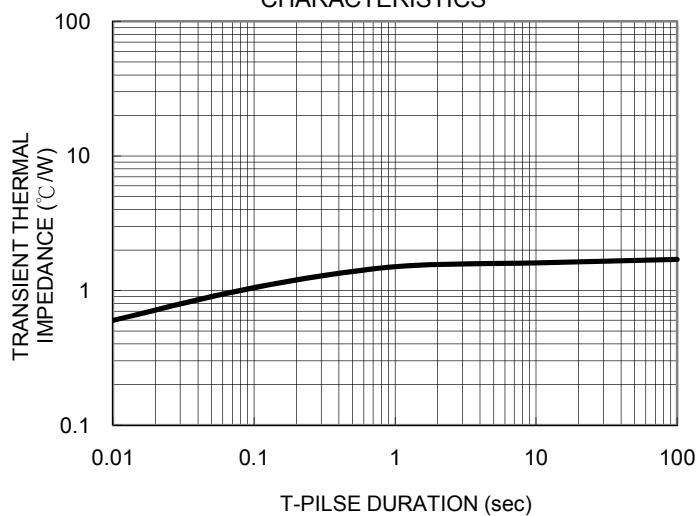
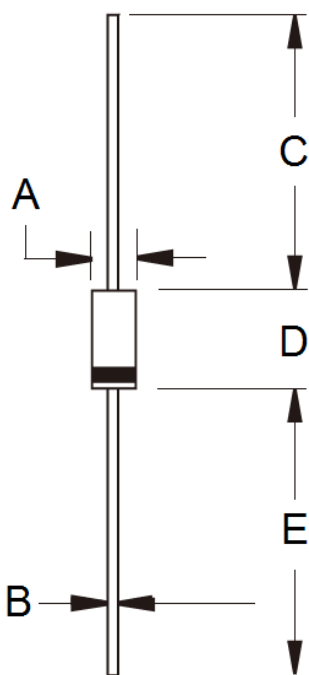


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



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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