

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



DO-204AC (DO-15)

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)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ 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 $T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$ $T_J=125^\circ\text{C}$	I_R	0.5			0.1						mA							
		10		5		-												
		-		-		2												
Voltage rate of change (Rated V_R)	dV/dt	10000									V/ μ s							
Typical thermal resistance	$R_{\theta JC}$	14.0									°C/W							
	$R_{\theta JL}$	21.7																
	$R_{\theta JA}$	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 μ s, 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)

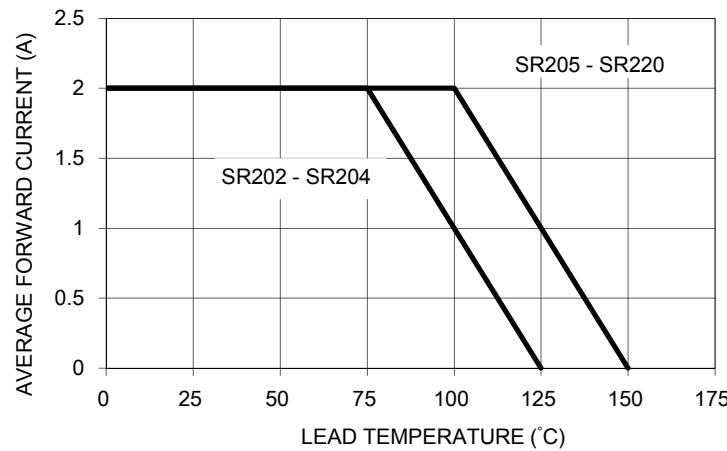
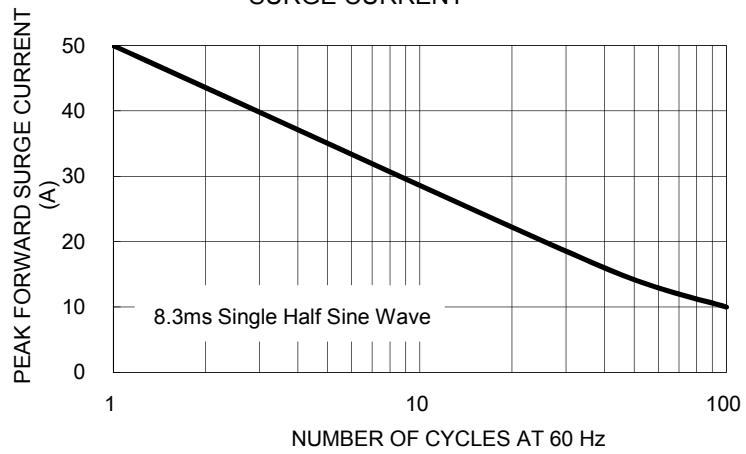
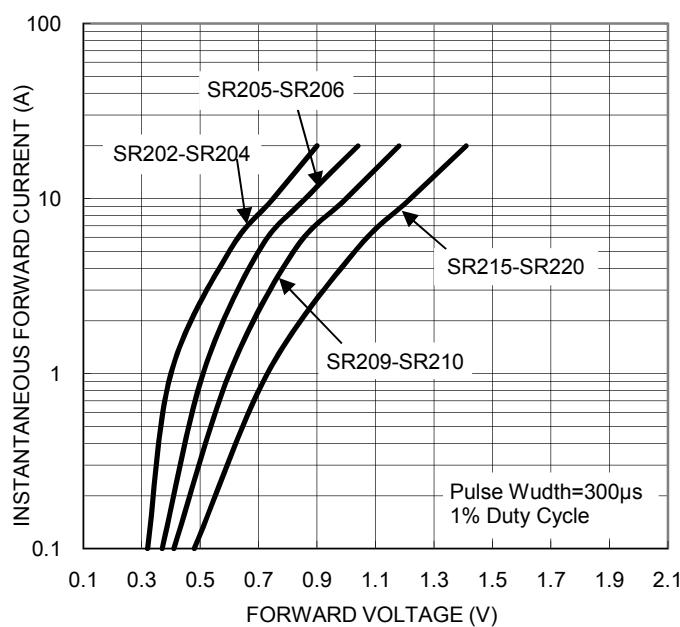
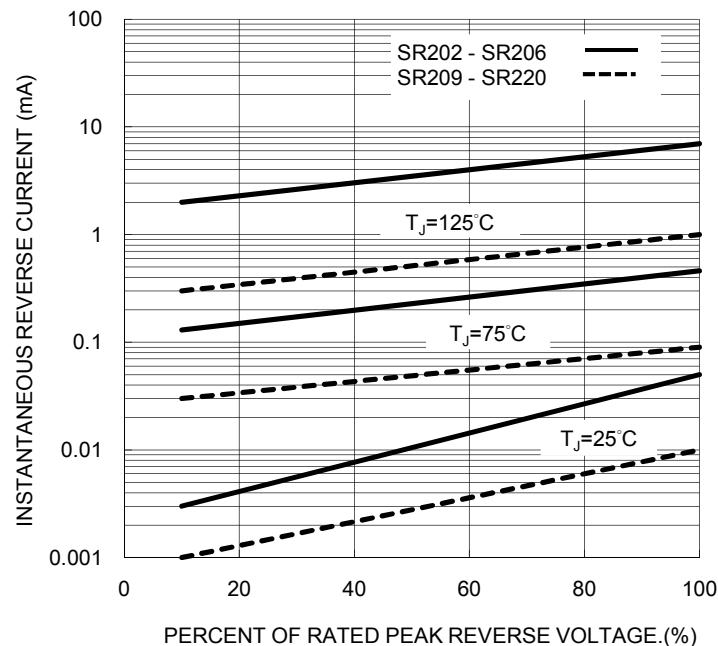
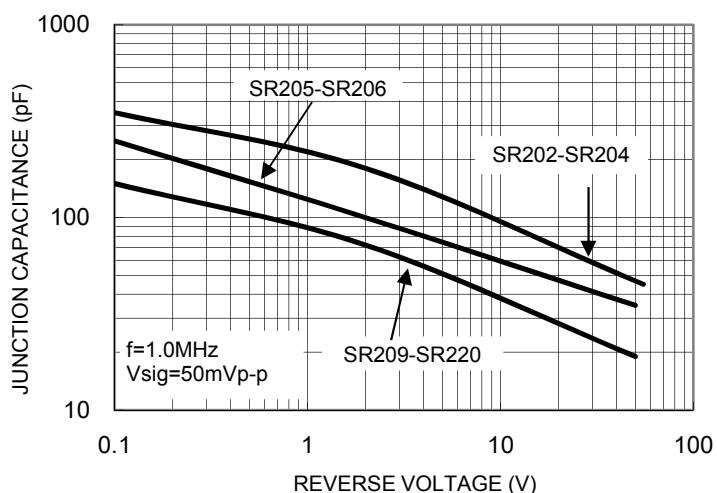
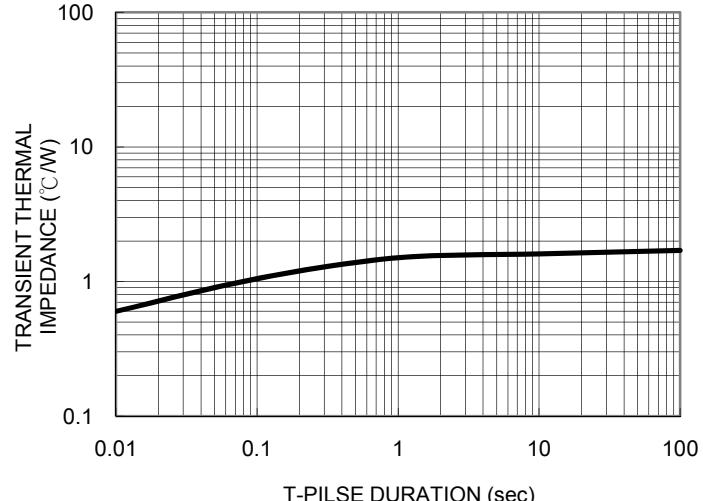
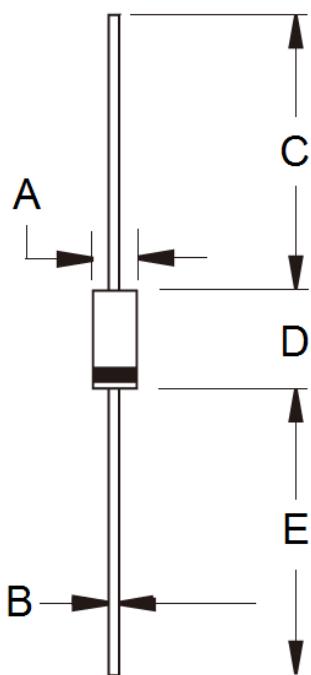
FIG.1- FORWARD CURRENT DERATING CURVE

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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