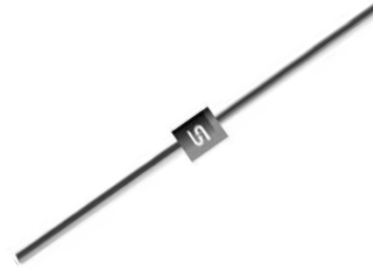


Schottky Barrier Rectifier

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-201AD



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: 1.1 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)											
PARAMETER	SYMBOL	SR 802	SR 803	SR 804	SR 805	SR 806	SR 809	SR 810	SR 815	SR 820	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)}	8									A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	150									A
Maximum instantaneous forward voltage (Note 1) @ 8 A	V _F	0.55			0.70		0.92		1.02		V
Maximum reverse current @ rated VR T _J =25 °C T _J =100°C T _J =125 °C	I _R	0.5					0.1				mA
		15			10		-				
		-			-		5				
Voltage rate of change (Rated V _R)	dV/dt	10000									V/μs
Typical thermal resistance	R _{θJA}	40									°C/W
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=300μs, 1% duty cycle

ORDERING INFORMATION					
PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
SR8xx (Note 1)	Prefix "H"	A0	Suffix "G"	DO-201AD	500 / Ammo box
		R0		DO-201AD	1,250 / 13" Paper reel
		B0		DO-201AD	500 / Bulk packing
		X0		DO-201AD	Forming

Note 1: "xx" defines voltage from 20V (SR802) to 200V (SR820)

EXAMPLE					
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
SR806 A0	SR806		A0		
SR806 A0G	SR806		A0	G	Green compound
SR806HA0	SR806	H	A0		AEC-Q101 qualified

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

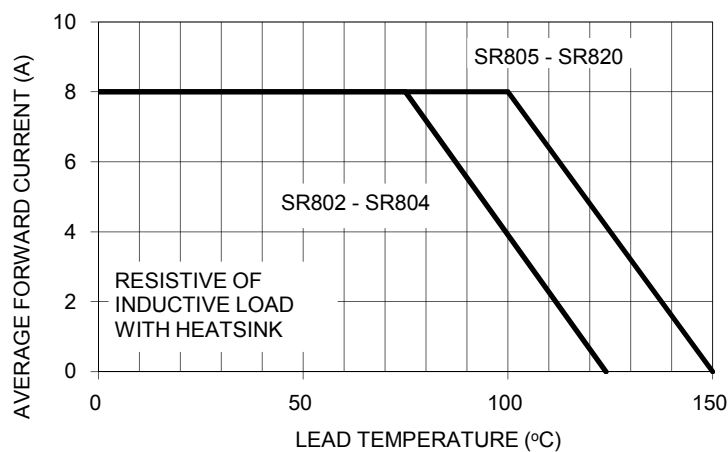


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

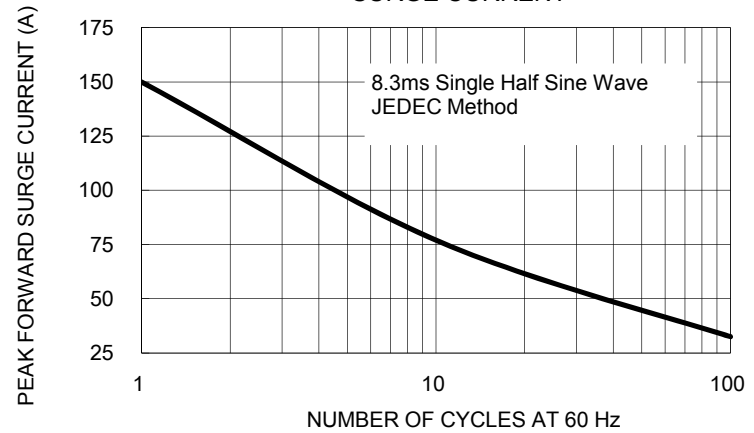


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

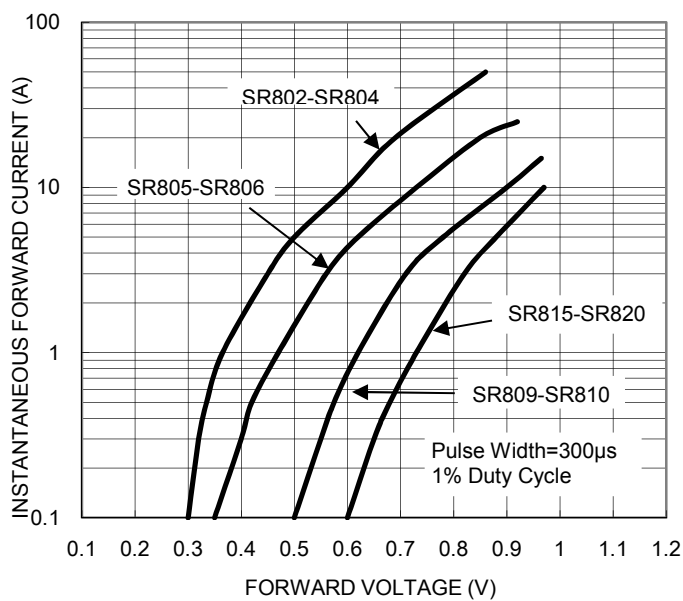


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

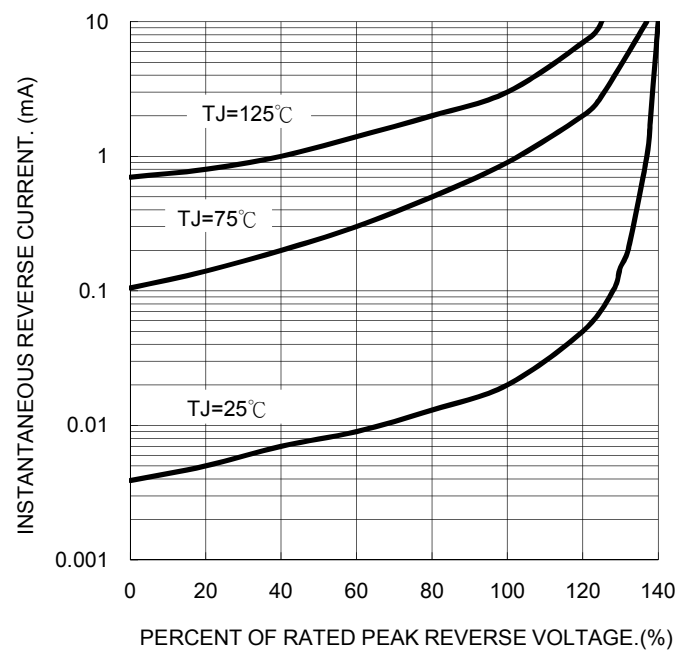


FIG. 5- TYPICAL JUNCTION CAPACITANCE

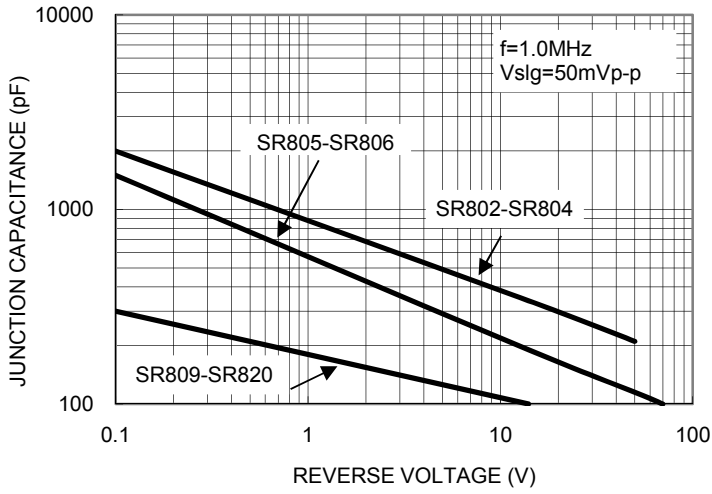
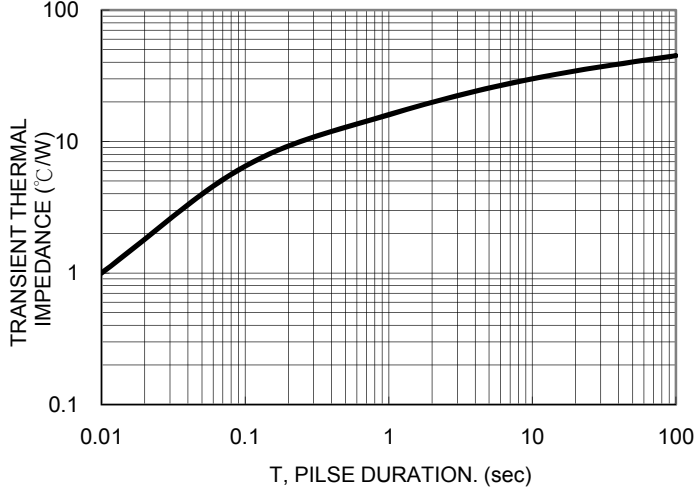
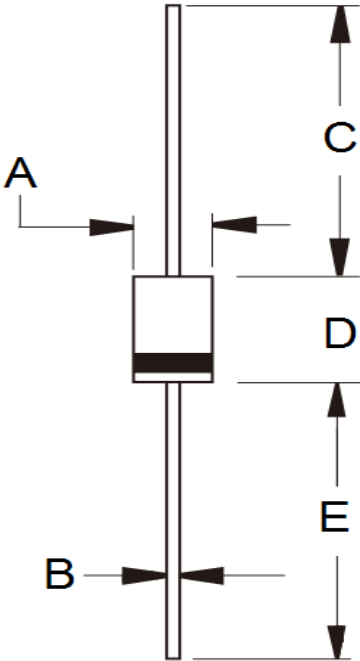


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	5.00	5.60	0.197	0.220
B	1.20	1.30	0.048	0.052
C	25.40	-	1.000	-
D	8.50	9.50	0.335	0.375
E	25.40	-	1.000	-

MARKING DIAGRAM



P/N = Specific Device Code
 G = Green Compound
 YWW = Date Code
 F = Factory Code

Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Taiwan Semiconductor:

[SR802](#) [SR803](#) [SR804](#) [SR805](#) [SR806](#) [SR809](#) [SR810](#) [SR815 R0](#) [SR802HR0](#) [SR803 R0](#) [SR804 R0](#) [SR809 R0](#)
[SR805 R0](#) [SR810 R0](#) [SR802 R0](#) [SR806 R0](#) [SR803HR0G](#) [SR805 R0G](#) [SR805HR0](#) [SR806HR0](#) [SR809HR0](#)
[SR810HR0](#) [SR806 R0G](#) [SR815HR0](#) [SR805HR0G](#) [SR802HR0G](#) [SR804HR0](#) [SR803HR0](#) [SR806HR0G](#) [SR815 R0G](#)
[SR809 R0G](#) [SR810HR0G](#) [SR804HR0G](#) [SR802 R0G](#) [SR815HR0G](#) [SR809HR0G](#) [SR810 R0G](#) [SR803 R0G](#)
[SR804 R0G](#)