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

TS-1

Pb-Free

RoHS COMPLIANT

MECHANICAL DATA

Case: TS-1

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: 0.2g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted)

PARAMETER	SYMBOL	SRT 12	SRT 13	SRT 14	SRT 15	SRT 16	SRT 19	SRT 110	SRT 115	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	90	100	150	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	63	70	105	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	90	100	150	V
Maximum average forward rectified current	$I_{F(AV)}$	1								A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	25								A
Maximum instantaneous forward voltage (Note 1) @ 1 A	V_F	0.55			0.70		0.80		0.90	V
Maximum reverse current @ rated VR T_J=25 ℃	I_R	0.5					0.1			mA
T_J=100℃		10			5		-			
T_J=125 ℃		-			-		2			
Typical junction capacitance (Note 2)	Cj	110			80		28			pF
Typical thermal resistance	$R_{\theta JA}$	50								^{O}C/W
Operating junction temperature range	T_J	- 55 to +125			- 55 to +150					^{O}C
Storage temperature range	T_{STG}	- 55 to +150								^{O}C

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

Note 2: Measured at 1.0 MHz and Applied V_R=4.0 Volts

ORDERING INFORMATION					
PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
SRT1xx (Note 1)	Prefix "H"	A0	Suffix "G"	TS-1	3,000 / Ammo box (52mm taping)
		A1		TS-1	3,000 / Ammo box (26mm taping)
		R0		TS-1	5,000 / 13" Paper reel
		B0		TS-1	1,000 / Bulk packing

Note 1: "xx" defines voltage from 20V (SRT12) to 150V (SRT115)

EXAMPLE					
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
SRT16 A0	SRT16		A0		
SRT16 A0G	SRT16		A0	G	Green compound
SRT16HA0	SRT16	H	A0		AEC-Q101 qualified

RATINGS AND CHARACTERISTICS CURVES

(TA=25℃ unless otherwise noted)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

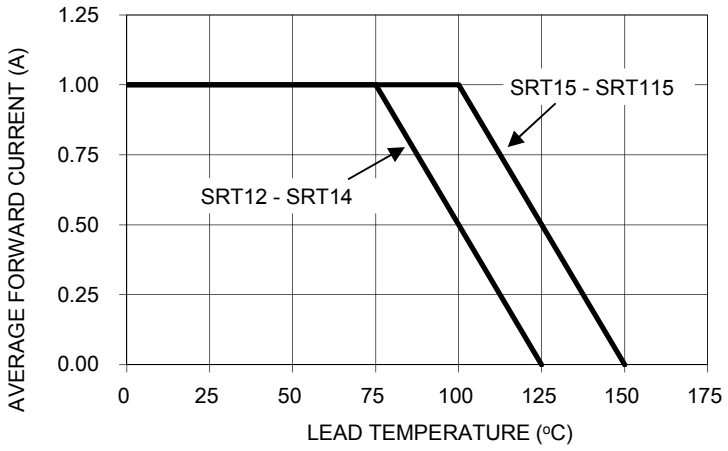


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

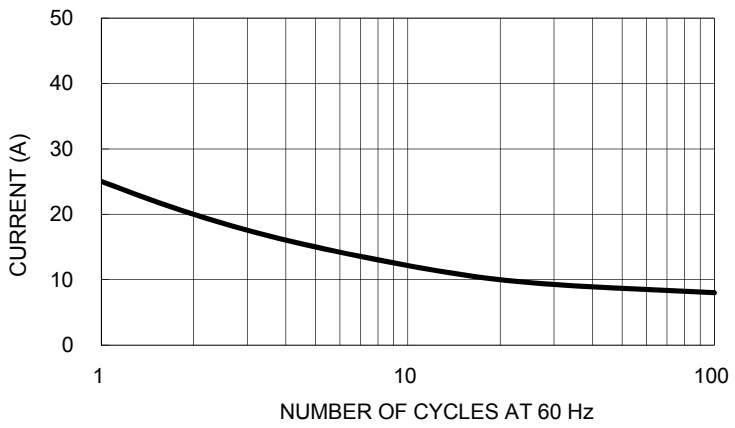


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

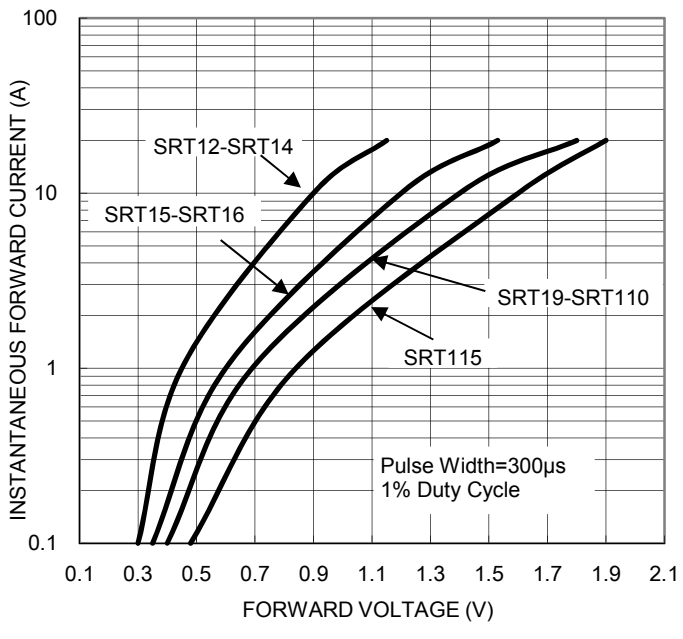


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

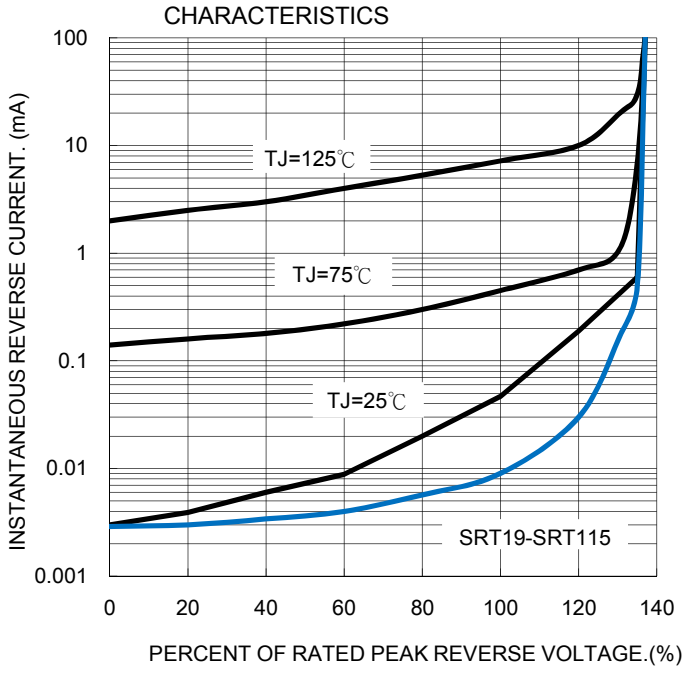


FIG. 5- TYPICAL JUNCTION CAPACITANCE

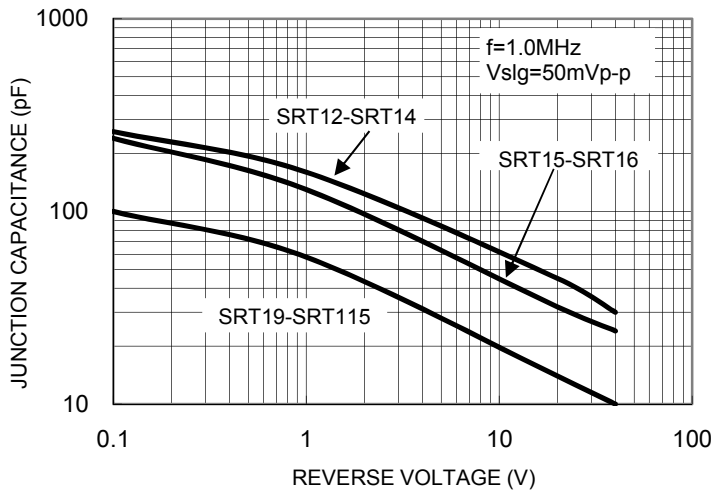
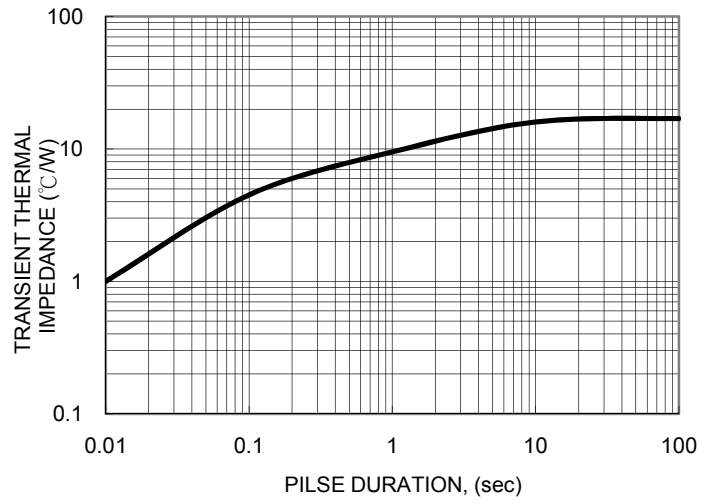
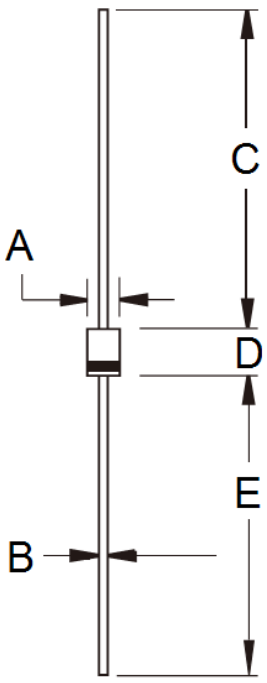


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.00	2.70	0.079	0.106
B	0.53	0.64	0.021	0.025
C	25.40	-	1.000	-
D	3.00	3.30	0.118	0.130
E	25.40	-	1.000	-

MARKING DIAGRAM

P/N = Specific Device Code
G = Green Compound
YW = 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 seling 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.

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

Наши контакты:

Телефон: +7 812 627 14 35

Электронная почта: sales@st-electron.ru

Адрес: 198099, Санкт-Петербург, Промышленная ул, дом № 19, литера Н, помещение 100-Н Офис 331