

Dual Common Cathode Schottky Rectifier

FEATURES

- Low power loss, high efficiency
- Ideal for automated placement
- Guardring for overvoltage protection
- High surge current capability
- Moisture sensitivity level: level 1, per J-STD-020
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition

MECHANICAL DATA

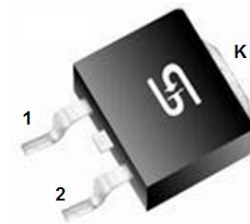
Case : TO-263AB(D²PAK)

Molding compound, UL flammability classification rating 94V-0
Base P/N with suffix "G" on packing code - halogen-free, RoHS compliant
Base P/N with prefix "H" on packing code - AEC-Q101 qualified

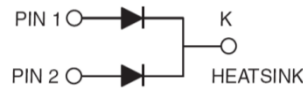
Terminal : Matte tin plated leads, solderable per JESD22-B102
Meet JESD 201 class 1A whisker test,
with prefix "H" on packing code meet JESD 201 class 2 whisker test

Polarity : As marked

Weight : 1.37 gram (approximately)



TO-263AB(D²PAK)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERSTICS (T _A =25℃ unless otherwise noted)										
PARAMETER	SYMBOL	SRS 1020	SRS 1030	SRS 1040	SRS 1050	SRS 1060	SRS 1090	SRS 10100	SRS 10150	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)}	10								A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	120								A
Maximum instantaneous forward voltage (Note 1) IF= 5 A	V _F	0.55			0.70		0.90		1.00	V
Maximum reverse current @ rated VR T _J =25 ℃ T _J =100 ℃ T _J =125 ℃	I _R	0.5					0.1			mA
		15			10		-			
		-					5			
Typical thermal resistance	R _{θJC}	2								°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=300u sec, 1% duty cycle

ORDERING INFORMATION					
PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
SRS10xx (Note 1)	Prefix "H"	RN	Suffix "G"	D ² PAK	800 / 13" Paper reel
		C0		D ² PAK	50 / Tube

Note 1: "xx" defines voltage from 20V (SRS1020) to 150V (SRS10150)

EXAMPLE					
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
SRS1060 RN	SRS1060		RN		
SRS1060 RNG	SRS1060		RN	G	Green compound
SRS1060HRN	SRS1060	H	RN		AEC-Q101 qualified

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1 FORWARD CURRENT DERATING CURVE

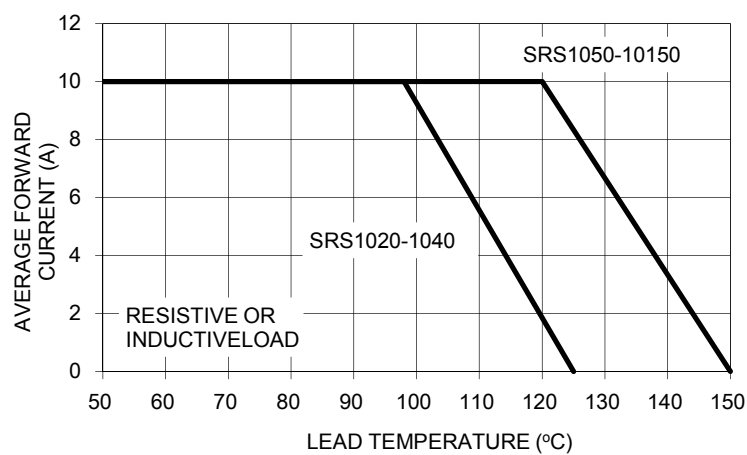


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

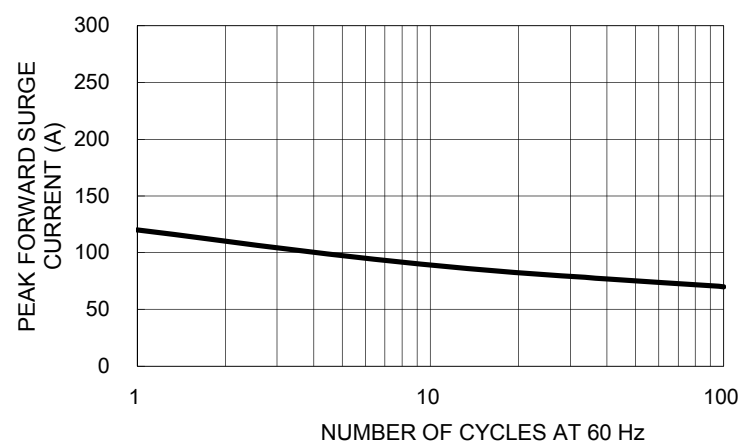


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

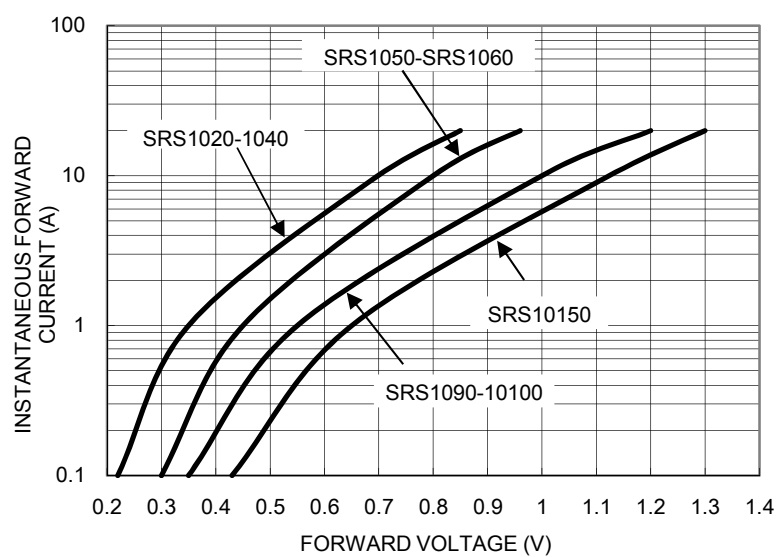


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

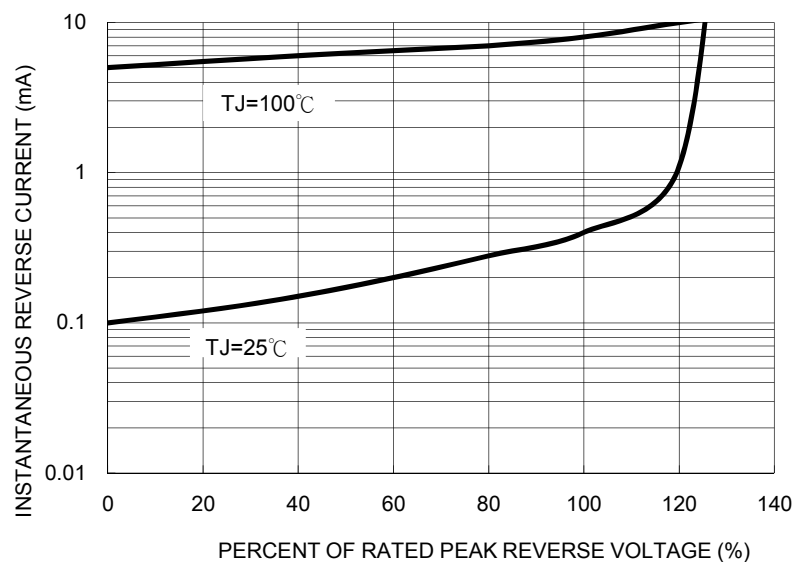


FIG. 5 TYPICAL JUNCTION CAPACITANCE

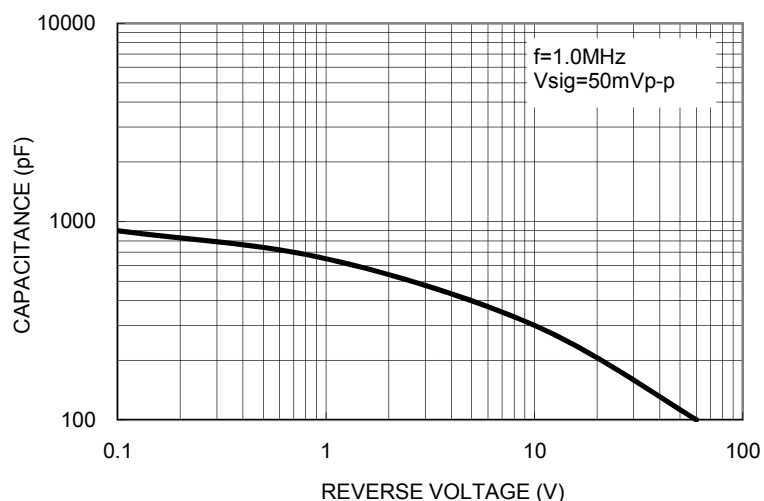
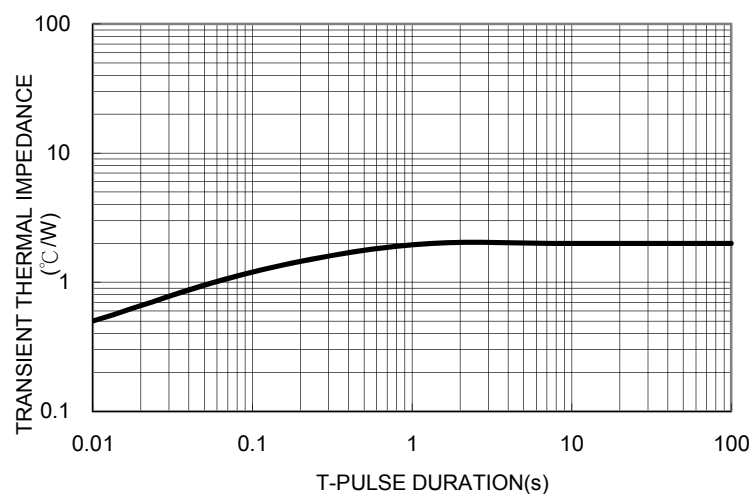
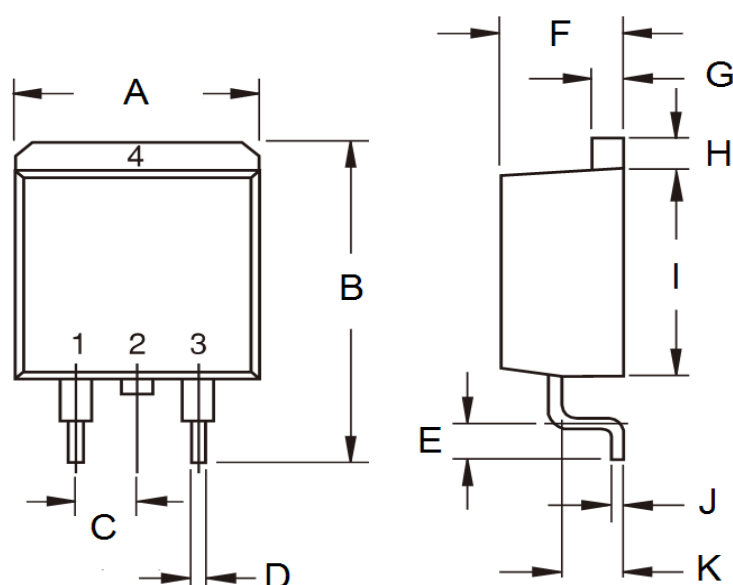


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE

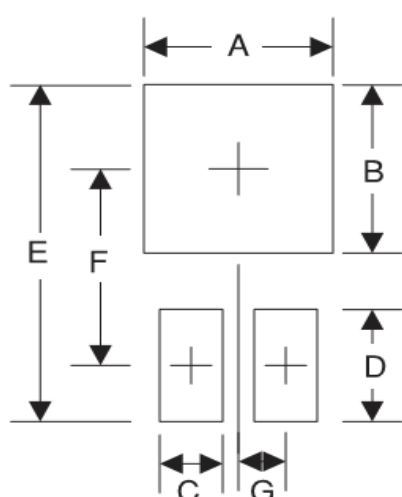


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	-	10.5	-	0.413
B	14.60	15.88	0.575	0.625
C	2.41	2.67	0.095	0.105
D	0.68	0.94	0.027	0.037
E	2.29	2.79	0.090	0.110
F	4.44	4.70	0.175	0.185
G	1.14	1.40	0.045	0.055
H	1.14	1.40	0.045	0.055
I	8.25	9.25	0.325	0.364
J	0.36	0.53	0.014	0.021
K	2.03	2.79	0.080	0.110

SUGGESTED PAD LAYOUT



Symbol	Unit(mm)
A	10.8
B	8.3
C	1.1
D	3.5
E	16.9
F	9.5
G	2.5

MARKING DIAGRAM



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

Mouser Electronics

Authorized Distributor

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[SRS10100](#) [SRS10150](#) [SRS1030](#) [SRS1040](#) [SRS1050](#) [SRS1060](#) [SRS1090](#) [SRS102](#)