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## 16A, 20V - 100V Dual Common Cathode Schottky Rectifiers

#### **FEATURES**

- Low power loss, high efficiency
- Ideal for automated placement
- 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: TO-263AB (D<sup>2</sup>PAK)

Molding compound, UL flammability classification rating 94V-0

Moisture sensitivity level: level 1, per J-STD-020 Part No. with suffix "H" means AEC-Q101 qualified

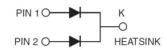
Packing code with suffix "G" means green compound (halogen-free) **Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

Polarity: As marked

Weight: 1.37 g (approximately)

### TO-263AB (D<sup>2</sup>PAK)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)									
PARAMETER	SYMBOL	SRS 1620	SRS 1630	SRS 1640	SRS 1650	SRS 1660	SRS 1690	SRS 16100	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	90	100	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	63	70	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	90	100	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	16				Α			
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	l <sub>FSM</sub>	150				Α			
Maximum instantaneous forward voltage (Note 1) $I_F$ = 8 A	V <sub>F</sub>		0.55		0.	70	0.	90	V
T <sub>J</sub> =25°C				0.5	1		0	).1	
Maximum reverse current @ rated V <sub>R</sub> T <sub>J</sub> =100°C	I <sub>R</sub>		15		1	0		-	mA
T <sub>J</sub> =125°C				-		5			
Typical thermal resistance	R <sub>eJC</sub>	2				°C/W			
Operating junction temperature range	T <sub>J</sub>	- 55 to +125 - 55 to +150			°C				
Storage temperature range	T <sub>STG</sub>	- 55 to +150			°C				

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



ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX (*)	PACKAGE	PACKING
SRS16xx	Н	RN	G	D <sup>2</sup> PAK	800 / 13" Paper reel
(Note 1)	11	MN	G		800 / 13" Plastic reel

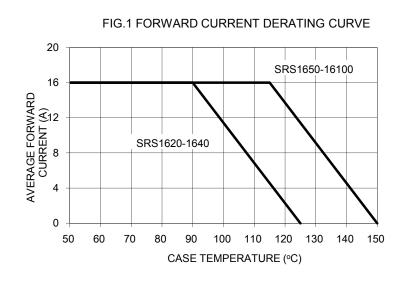
Note 1: "xx" defines voltage from 20V (SRS1620) to 100V (SRS16100)

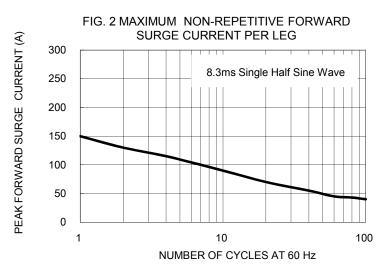
<sup>\*:</sup> Optional available

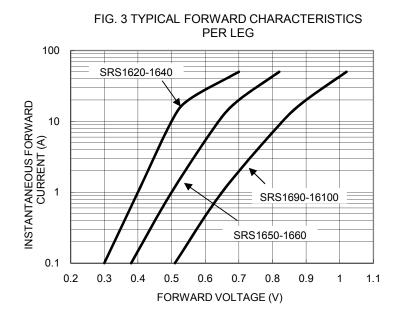
EXAMPLE					
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
SRS1660HRNG	SRS1660	Н	RN	G	AEC-Q101 qualified Green compound

#### **RATINGS AND CHARACTERISTICS CURVES**

(T<sub>A</sub>=25°C unless otherwise noted)







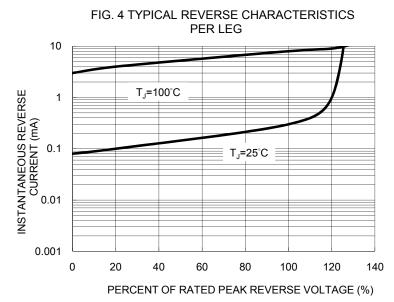






FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG

10000

SRS1620-1640

SRS1650-1660

SRS1690-16100

O.1

1

100

REVERSE VOLTAGE (V)

FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG

100

100

10

10

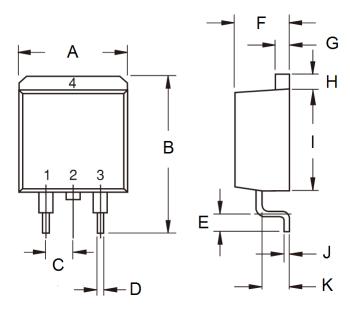
10

0.1

1 10 100

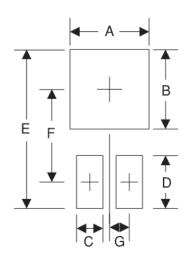
T-PULSE DURATION(s)

## PACKAGE OUTLINE DIMENSIONS TO-263AB (D<sup>2</sup>PAK)



DIM.	Unit	(mm)	Unit (inch)		
DIIVI.	Min	Max	Min	Max	
Α	•	10.5	1	0.413	
В	14.60	15.88	0.575	0.625	
С	2.41	2.67	0.095	0.105	
D	0.68	0.94	0.027	0.037	
Е	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	
Н	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)	Unit (inch)
Α	10.8	0.425
В	8.3	0.327
С	1.1	0.043
D	3.5	0.138
E	16.9	0.665
F	9.5	0.374
G	2.5	0.098

## **MARKING DIAGRAM**



P/N = Specific Device Code G = Green Compound

YWW = Date Code

F = Factory Code





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Document Number: DS\_D1309065 Version: K15