



# **Dual Common Cathode Schottky Rectifier**

## **FEATURES**

- 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





## **TO-220AB**



#### **MECHANICAL DATA**

Case: TO-220AB

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

Polarity: As marked

**Mounting torque:** 5 in-lbs maximum **Weight:** 1.8 g (approximately)

DADAMETED	SYMBOL	SR	SR	SR SR S	SR	SR SR	SR S	SR	SR SR	UNIT
PARAMETER		1620	1630	1640	1650	1660	1690	16100	16150	
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 <sub>F(AV)</sub>	v) 16					Α			
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	170					А			
Maximum instantaneous forward voltage (Note 1) $I_F$ = 8 A	V <sub>F</sub>	0.55 0.70		70	0.90		1.05	V		
Maximum reverse current @ rated VR T <sub>J</sub> =25 ℃		0.5 0.1								
T <sub>J</sub> =100℃	I <sub>R</sub>	15		10		5			mA	
Voltage rate of change (Rated V <sub>R</sub> )	dV/dt	10000				V/µs				
Typical thermal resistance	$R_{ heta JC}$	2.5			°C/W					
Operating junction temperature range	T <sub>J</sub>	- 55 to +125 - 55 to +150					οС			
Storage temperature range	T <sub>STG</sub>	- 55 to +150				οС				

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





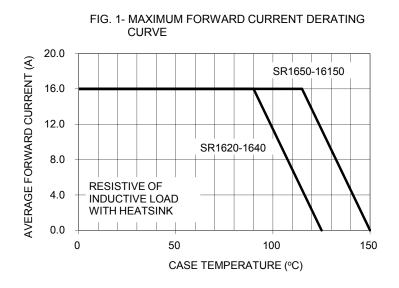
ORDERING INFORMATION						
PART NO.	O. AEC-Q101 PACKING CODE GREEN COMPOUND CODE		PACKAGE	PACKING		
SR16xx (Note 1)	Prefix "H"	C0	Suffix "G"	TO-220AB	50 / Tube	

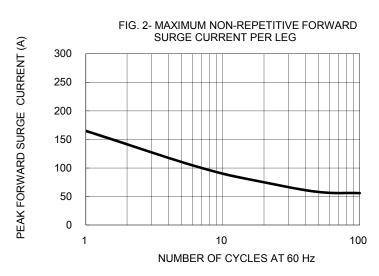
Note 1: "xx" defines voltage from 20V (SR1620) to 150V (SR16150)

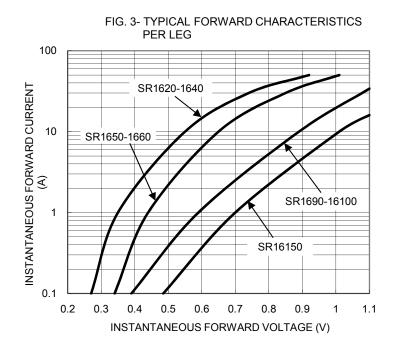
EXAMPLE							
PREFERRED P/N	PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	DESCRIPTION		
		QUALIFIED		CODE			
SR1660 C0	SR1660		C0				
SR1660 C0G	SR1660		C0	G	Green compound		
SR1660HC0	SR1660	Н	C0		AEC-Q101 qualified		

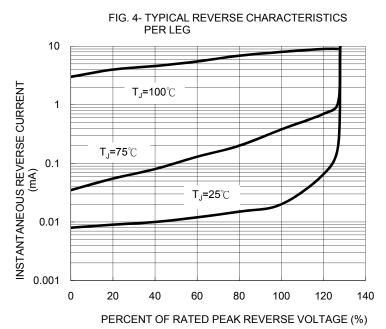
#### **RATINGS AND CHARACTERISTICS CURVES**

(TA=25°C unless otherwise noted)

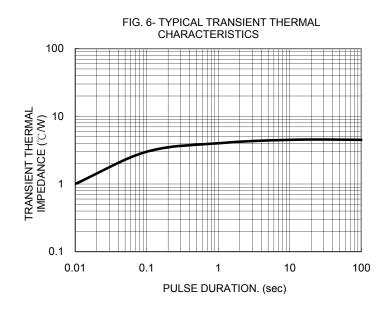




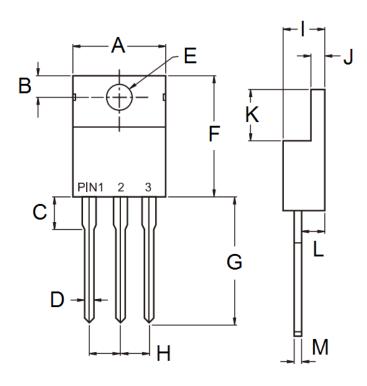








## **PACKAGE OUTLINE DIMENSIONS**



DIM.	Unit	(mm)	Unit (inch)		
Dilvi.	Min Max		Min	Max	
Α	-	10.50	-	0.413	
В	2.62	3.44	0.103	0.135	
С	2.80	4.20	0.110	0.165	
D	0.68	0.94	0.027	0.037	
E	3.54	4.00	0.139	0.157	
F	14.60	16.00	0.575	0.630	
G	13.19	14.79	0.519	0.582	
Н	2.41	2.67	0.095	0.105	
ı	4.42	4.76	0.174	0.187	
J	1.14	1.40	0.045	0.055	
K	5.84	6.86	0.230	0.270	
L	2.20	2.80	0.087	0.110	
М	0.35	0.64	0.014	0.025	

# **MARKING DIAGRAM**



P/N = Marking Code G = Green Compound YWW = Date Code

= Factory Code

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SR1640HC0 SR1660HC0 SR1630HC0 SR1650HC0 SR1690HC0 SR16150HC0 SR16100HC0 SR1620HC0