



# **Dual Common Cathode Schottky Rectifier**

# **FEATURES**

- Low power loss, high efficiency
- Guardring for overvoltage protection
- High surge current capability
- UL Recognized File # E-326243
- 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-247AD (TO-3P)

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

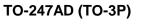
with prefix "H" on packing code meet JESD 201 class 2 whisker test

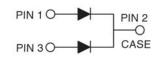
Polarity: As marked

**Mounting torque:** 10 in-lbs maximum **Weight:** 6.1 g (approximately)











MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)										
PARAMETER	SYMBOL	SR 3020	SR 3030	SR 3040	SR 3050	SR 3060	SR 3090	SR 30100	SR 30150	UNIT
		PT	PT	PT	PT	PT	PT	PT	PT	
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>	30				Α				
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	300				Α				
Maximum instantaneous forward voltage (Note 1) $I_F$ = 15 A	V <sub>F</sub>	0.55 0.70		0.	90	1.00	V			
Maximum reverse current @ rated VR T <sub>J</sub> =25 °C		1.0 0.5							mA	
T <sub>J</sub> =100 ℃	I <sub>R</sub>	20			15			10		IIIA
Typical thermal resistance	$R_{ heta JC}$	1.5			°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 °C				οС				

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

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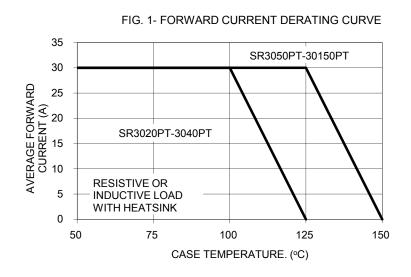
ORDERING INFORMATION							
PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING		
SR30xxPT (Note 1)	Prefix "H"	C0	Suffix "G"	TO-3P	30 / Tube		

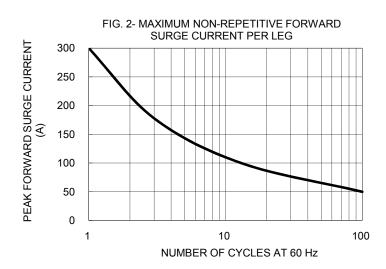
Note 1: "xx" defines voltage from 20V (SR3020PT) to 150V (SR30150PT)

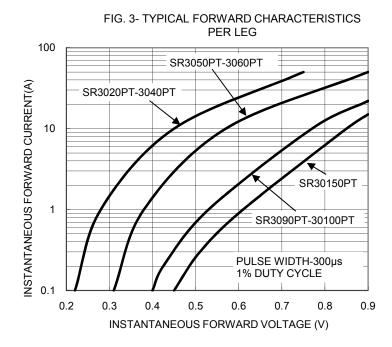
EXAMPLE								
PREFERRED P/N	PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	DESCRIPTION			
		QUALIFIED		CODE				
SR3060PT C0	SR3060PT		C0					
SR3060PT C0G	SR3060PT		C0	G	Green compound			
SR3060PTHC0	SR3060PT	Н	C0		AEC-Q101 qualified			

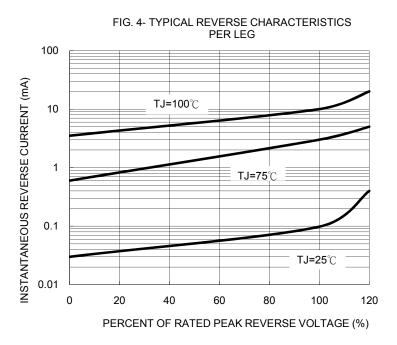
#### **RATINGS AND CHARACTERISTICS CURVES**

(TA=25°C unless otherwise noted)









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FIG. 5- TYPICAL JUNCTION CAPACITANCE PER LEG

10000

SR3050PT-3060PT

SR3020PT-3040PT

SR3090PT-30150PT

100

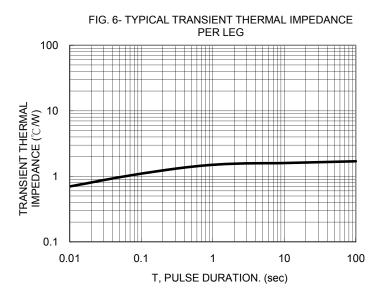
0.1

1

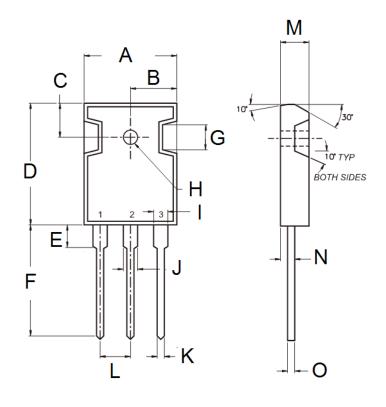
10

100

REVERSE VOLTAGE (V)



# PACKAGE OUTLINE DIMENSIONS



DIM.	Unit	(mm)	Unit (inch)			
DIIVI.	Min	Max	Min	Max		
Α	15.90	16.40	0.626	0.646		
В	7.90	8.20	0.311	0.323		
С	5.70	6.20	0.224	0.244		
D	20.80	21.30	0.819	0.839		
E	3.50	4.10	0.138	0.161		
F	19.70	20.20	0.776	0.795		
G	-	4.30	-	0.169		
Н	2.90	3.40	0.114	0.134		
I	1.93	2.18	0.076	0.086		
J	2.97	3.22	0.117	0.127		
K	1.12	1.22	0.044	0.048		
L	5.20	5.70	0.205	0.224		
М	4.90	5.16	0.193	0.203		
N	2.70	3.00	0.106	0.118		
0	0.51	0.76	0.020	0.030		

# **MARKING DIAGRAM**



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

F = Factory Code

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