

## 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

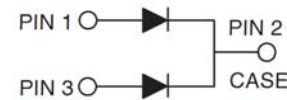
with prefix "H" on packing code meet JESD 201 class 2 whisker test

**Polarity:** As marked

**Mounting torque:** 10 in-lbs maximum

**Weight:** 6.1 g (approximately)

### TO-247AD (TO-3P)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)									
PARAMETER	SYMBOL	SR 4020 PT	SR 4030 PT	SR 4040 PT	SR 4050 PT	SR 4060 PT	SR 4090 PT	SR 40100 PT	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	90	100	V
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	63	70	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	90	100	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	40							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	400							A
Maximum instantaneous forward voltage (Note 1) I <sub>F</sub> = 20 A	V <sub>F</sub>	0.55			0.70		0.90		V
Maximum reverse current @ rated VR T <sub>J</sub> =25 °C T <sub>J</sub> =100 °C T <sub>J</sub> =125 °C	I <sub>R</sub>	1.0					0.5		mA
		30			20		-		
		-					10		
Typical thermal resistance	R <sub>θJC</sub>	1.2							°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.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
SR40xxPT (Note 1)	Prefix "H"	C0	Suffix "G"	TO-3P	30 / Tube

Note 1: "xx" defines voltage from 20V (SR4020PT) to 100V (SR40100PT)

EXAMPLE					
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
SR4060PT C0	SR4060PT		C0		
SR4060PT C0G	SR4060PT		C0	G	Green compound
SR4060PTHC0	SR4060PT	H	C0		AEC-Q101 qualified

## RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1- FORWARD CURRENT DERATING CURVE

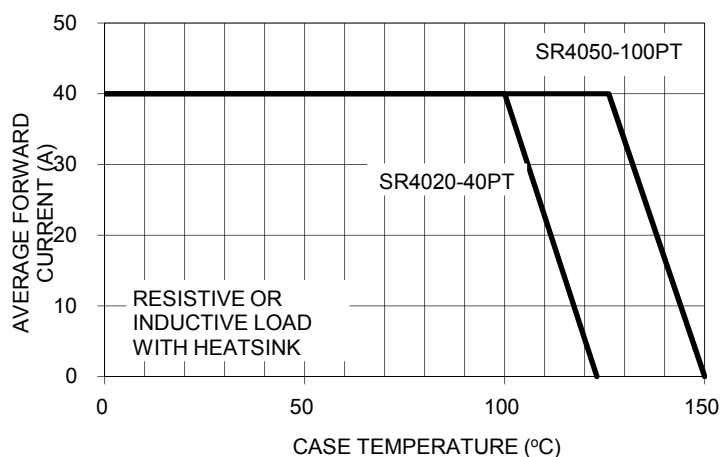


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

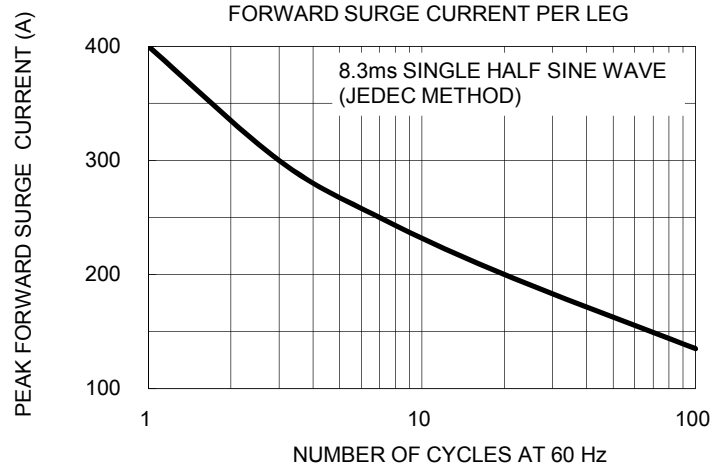


FIG. 3- TYPICAL FORWARD CHARACTERISTICS PER LEG

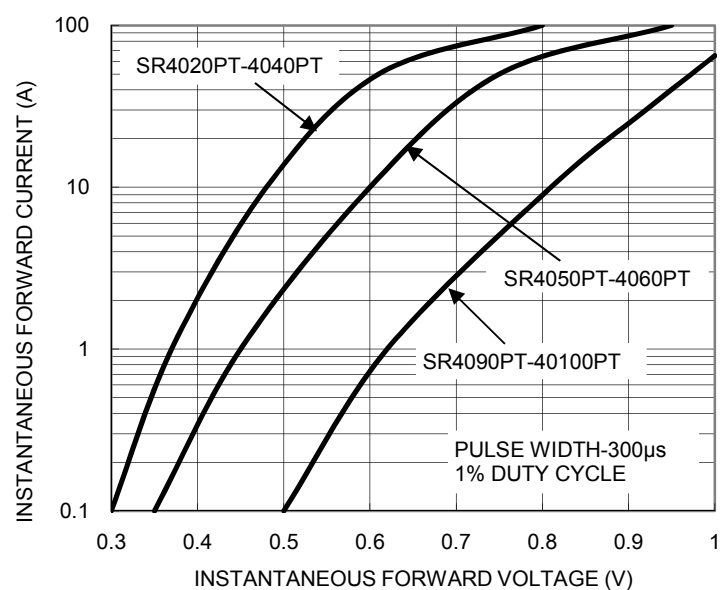


FIG. 4- TYPICAL REVERSE CHARACTERISTICS PER LEG

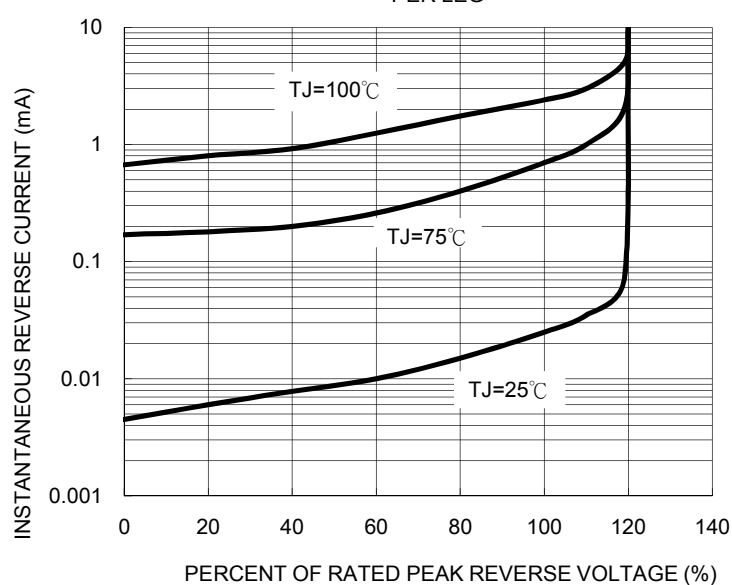


FIG. 5- TYPICAL JUNCTION CAPACITANCE PER LEG

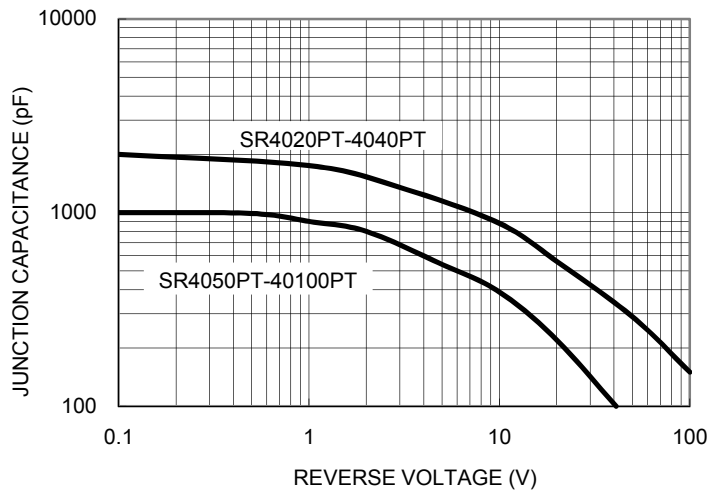
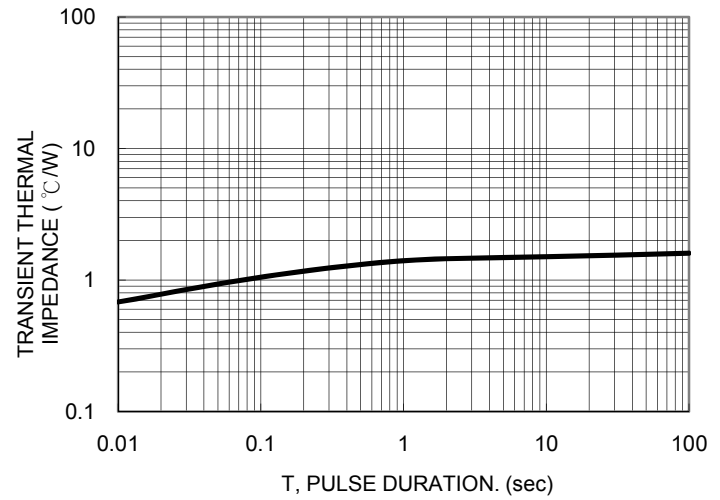
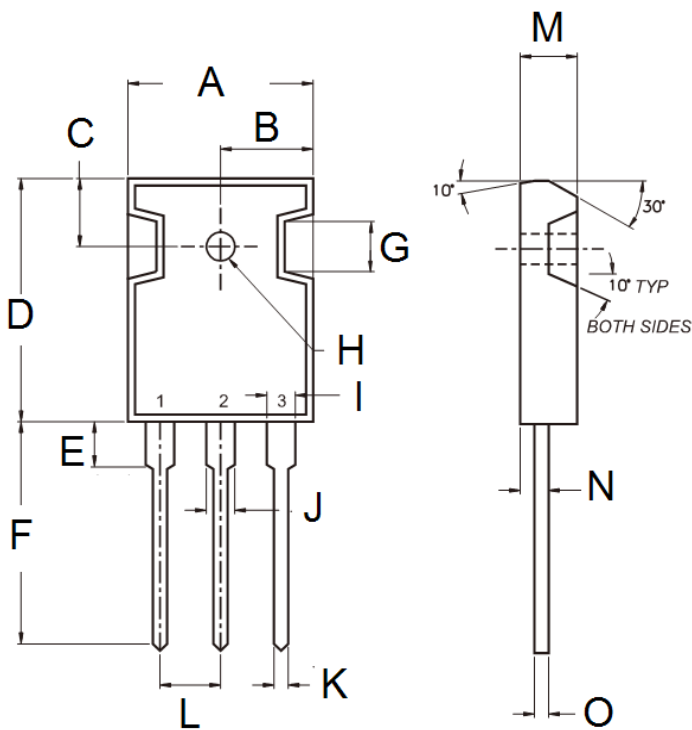


FIG. 6- TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG



## PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	15.90	16.40	0.626	0.646
B	7.90	8.20	0.311	0.323
C	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
H	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
M	4.90	5.16	0.193	0.203
N	2.70	3.00	0.106	0.118
O	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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