

## **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)

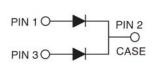
Molding compound, UL flammability classification rating 94V-0 Base P/N with suffix "G" on packing code - halogen-free Base P/N with prefix "H" on packing code - AEC-Q101 qualified **Terminal:** Matte tin plated leads, solderable per JESD22-B102 Meet JESD 201 class 1A whisker test with prefix "H" on packing 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)							
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	
V <sub>RRM</sub>	20	30	40	50	60	90	100	150	V
V <sub>RMS</sub>	14	21	28	35	42	63	70	105	V
V <sub>DC</sub>	20	30	40	50	60	90	100	150	V
I <sub>F(AV)</sub>	30				А				
I <sub>FSM</sub>	300				А				
V <sub>F</sub>	0.55 0.70		0.	90	1.00	V			
	1.0 0.5								
I <sub>R</sub>	20			15			10		mA
$R_{ extsf{ heta}JC}$	1.5			<sup>o</sup> C/W					
TJ	- 55 to +125 - 55 to +150				°C				
T <sub>STG</sub>	- 55 to +150			°C					
	$V_{RRM}$ $V_{RMS}$ $V_{DC}$ $I_{F(AV)}$ $I_{FSM}$ $V_{F}$ $I_{R}$ $R_{\theta JC}$ $T_{J}$	$\begin{tabular}{ c c c } & $3020$ \\ $PT$ \\ $PT$ \\ $20$ \\ $20$ \\ $14$ \\ $00$ \\ $14$ \\ $14$ \\ $20$ \\ $14$ \\ $20$ \\ $14$ \\ $20$ \\ $14$ \\ $20$ \\ $14$ \\ $20$ \\ $20$ \\ $14$ \\ $20$ \\ $20$ \\ $14$ \\ $20$ \\ $20$ \\ $14$ \\ $20$ \\ $20$ \\ $20$ \\ $14$ \\ $20$ \\$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c } \mbox{SYMBOL} & \mbox{3020} & \mbox{3030} & \mbox{3040} \\ \mbox{PT} & \mbox{PT} & \mbox{PT} & \mbox{PT} \\ \mbox{PT} & \mbox{PT} & \mbox{PT} \\ \mbox{PT} & \mbox{20} & \mbox{30} & \mbox{40} \\ \mbox{40} & \mbox{40} \\ \mbox{V}_{RMS} & \mbox{14} & \mbox{21} & \mbox{28} \\ \mbox{V}_{RMS} & \mbox{20} & \mbox{30} & \mbox{40} \\ \mbox{V}_{RMS} & \mbox{20} & \mbox{30} & \mbox{40} \\ \mbox{I}_{F(AV)} & \mbox{20} & \mbox{30} & \mbox{40} \\ \mbox{I}_{F(AV)} & \mbox{20} & \mbox{30} & \mbox{40} \\ \mbox{I}_{F(AV)} & \mbox{50} & \mbox{50} & \mbox{50} \\ \mbox{V}_{F} & \mbox{0.55} & \mbox{50} & \mbox{50} \\ \mbox{I}_{R} & \mbox{20} & \mbox{50} & \mbox{50} \\ \mbox{R}_{\theta,JC} & \mbox{50} & \mbox{50} & \mbox{50} \\ \mbox{7} & \mbox{50} & \mbox{50} & \mbox{50} \\ \mbox{50} & \mbox{50} & \mbox{50} & \mbox{50} \\ \mbox{50} & \mbox{50} & \mbox{50} & \mbox{50} & \mbox{50} \\ \mbox{50} & \mbox{50} & \mbox{50} & \mbox{50} & \mbox{50} & \mbox{50} \\ \mbox{50} & \mbox{50}$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c } SYMBOL & 3020 & 3030 & 3040 & 3050 & 3060 \\ \hline PT & PT & PT & PT & PT \\ \hline V_{RM} & 20 & 30 & 40 & 50 & 60 \\ \hline V_{RMS} & 14 & 21 & 28 & 35 & 42 \\ \hline V_{DC} & 20 & 30 & 40 & 50 & 60 \\ \hline I_{F(AV)} & & & & & & & & & \\ \hline I_{FSM} & & & & & & & & & & & \\ \hline V_{F} & 0.55 & & 0.75 & & & & & & & \\ \hline V_{R} & & & & & & & & & & & & \\ \hline I_{R} & & & & & & & & & & & & & \\ \hline I_{R} & & & & & & & & & & & & & & \\ \hline I_{R} & & & & & & & & & & & & & & & \\ \hline I_{R} & & & & & & & & & & & & & & & \\ \hline I_{R} & & & & & & & & & & & & & & & & \\ \hline I_{R} & & & & & & & & & & & & & & & & & \\ \hline I_{R} & & & & & & & & & & & & & & & & & & \\ \hline I_{R} & & & & & & & & & & & & & & & & & & \\ \hline I_{R} & & & & & & & & & & & & & & & & & & \\ \hline I_{R} & & & & & & & & & & & & & & & & & & &$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c } SYMBOL & 3020 & 3030 & 3040 & 3050 & 3060 & 3090 & 30100 \\ \hline PT & PT & PT & PT & PT & PT & PT \\ \hline V_{RM} & 20 & 30 & 40 & 50 & 60 & 90 & 100 \\ \hline V_{RMS} & 14 & 21 & 28 & 35 & 42 & 63 & 70 \\ \hline V_{DC} & 20 & 30 & 40 & 50 & 60 & 90 & 100 \\ \hline I_{F(AV)} & & & & & & & & & & & & \\ \hline I_{FSM} & & & & & & & & & & & & & & & & & \\ \hline V_F & 0.55 & & 0.70 & 0.90 & & & & & & & & & & & & \\ \hline I_R & & & & & & & & & & & & & & & & & & &$	$\begin{array}{c c c c c c } SYMBOL & 3020 & 3030 & 3040 & 3050 & 3060 & 3090 & 30100 & 30150 \\ \hline PT & PT & PT & PT & PT & PT & PT \\ \hline V_{RRM} & 20 & 30 & 40 & 50 & 60 & 90 & 100 & 150 \\ \hline V_{RMS} & 14 & 21 & 28 & 35 & 42 & 63 & 70 & 105 \\ \hline V_{DC} & 20 & 30 & 40 & 50 & 60 & 90 & 100 & 150 \\ \hline I_{F(AV)} & & & & & & & & & & & & & & & & \\ \hline I_{FSM} & & & & & & & & & & & & & & & & & & &$

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



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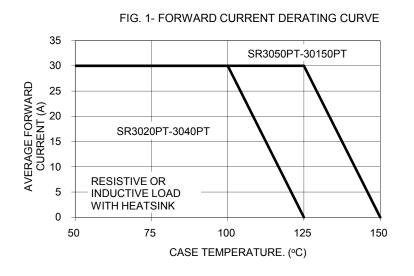
ORDERING INFORMATION						
PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING	
SR30xxPT (Note 1)	Prefix "H"	CO	Suffix "G"	TO-3P	30 / Tube	
Note 1: "yy" defines voltage from 201/ (SP2020PT) to 1501/ (SP20150PT)						

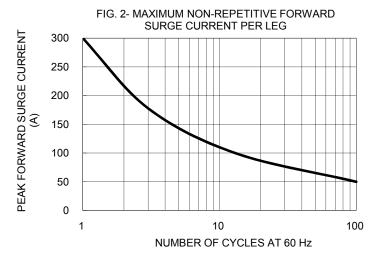
Note 1: "xx" defines voltage from 20V (SR3020PT) to 150V (SR30150PT)

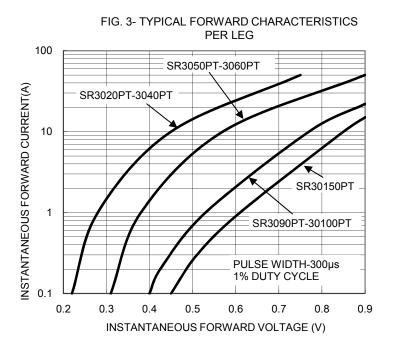
EXAMPLE							
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION		
SR3060PT C0	SR3060PT		C0				
SR3060PT C0G	SR3060PT		C0	G	Green compound		
SR3060PTHC0	SR3060PT	Н	C0		AEC-Q101 qualified		

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

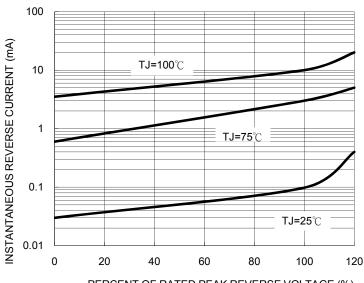
(TA=25°C unless otherwise noted)







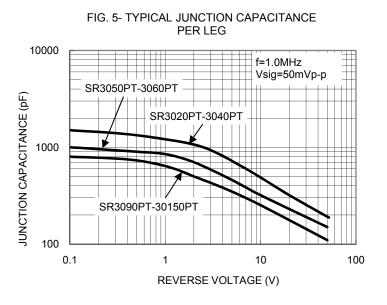


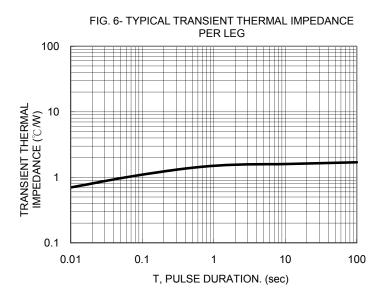


PERCENT OF RATED PEAK REVERSE VOLTAGE (%)

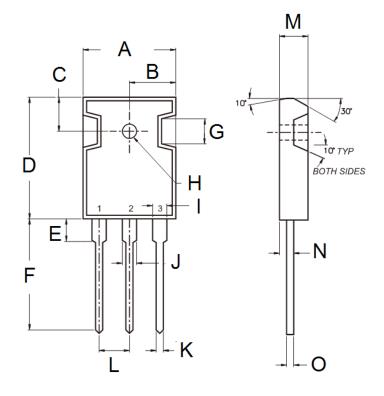


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#### PACKAGE OUTLINE DIMENSIONS



P/N

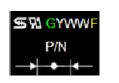
YWW

G

F

DIM.	Unit	(mm)	Unit (inch)		
Dilvi.	Min	Max	Min	Max	
А	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	
К	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	
Ν	2.70	3.00	0.106	0.118	
0	0.51	0.76	0.020	0.030	

#### **MARKING DIAGRAM**



= Marking Code

= Green Compound

- = Date Code
- = Factory Code



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 SR3030PTHC0
 SR30100PTHC0
 SR3040PTHC0
 SR3050PTHC0
 SR30