

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

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

Polarity: As marked

Mounting torque: 10 in-lbs maximum

Weight: 5.6 g (approximately)



TO-247AD (TO-3P)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	SR 2020 PT	SR 2030 PT	SR 2040 PT	SR 2050 PT	SR 2060 PT	SR 2090 PT	SR 20100 PT	SR 20150 PT	UNIT	
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 _{F(AV)}					20				A	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}					200				A	
Maximum instantaneous forward voltage (Note 1) I _F = 10 A	V _F		0.55		0.70		0.92		1.02	V	
Maximum reverse current @ rated VR T _J =25 °C T _J =100 °C T _J =125 °C	I _R		0.5		0.1					mA	
		15		10		-					
		-				5					
Typical thermal resistance	R _{θJC}			1.5						°C/W	
Operating junction temperature range	T _J	- 55 to +125			- 55 to +150					°C	
Storage temperature range	T _{STG}			- 55 to +150						°C	

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

ORDERING INFORMATION				
PART NO.	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
SR20xxPT (Note 1)	C0	Suffix "G"	TO-3P	30 / Tube

Note 1: "xx" defines voltage from 20V (SR2020PT) to 150V (SR20150PT)

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
SR2060PT C0	SR2060PT	C0		
SR2060PT C0G	SR2060PT	C0	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1- FORWARD CURRENT DERATING CURVE

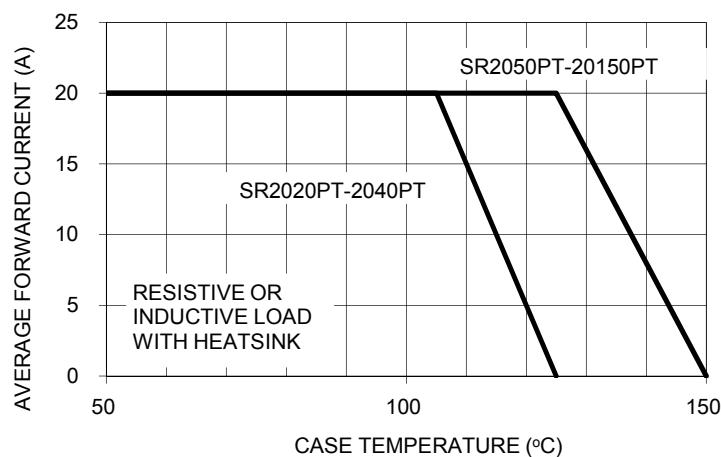


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

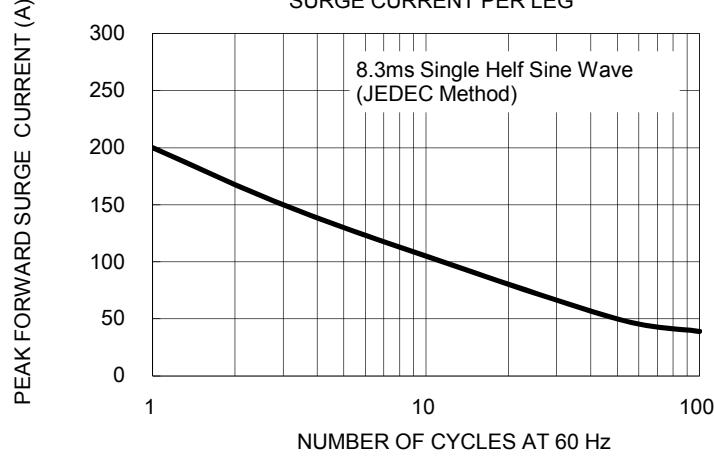


FIG. 3- TYPICAL FORWARD CHARACTERISTICS PER LEG

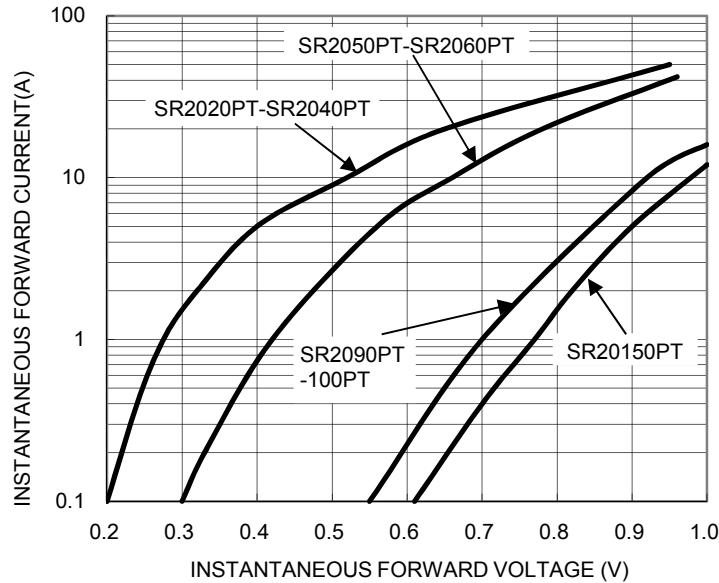


FIG. 4- TYPICAL REVERSE CHARACTERISTICS PER LEG

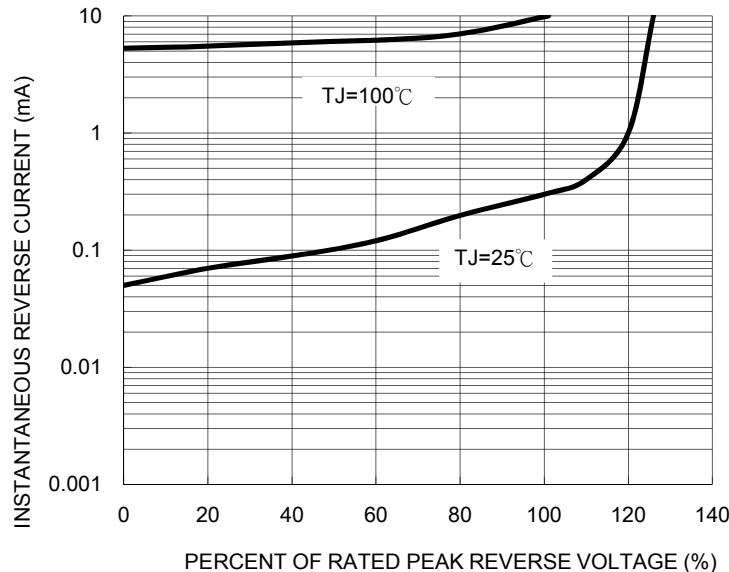
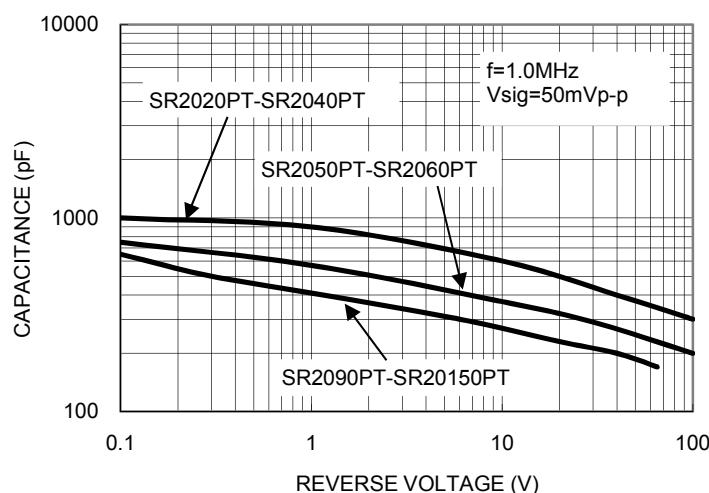
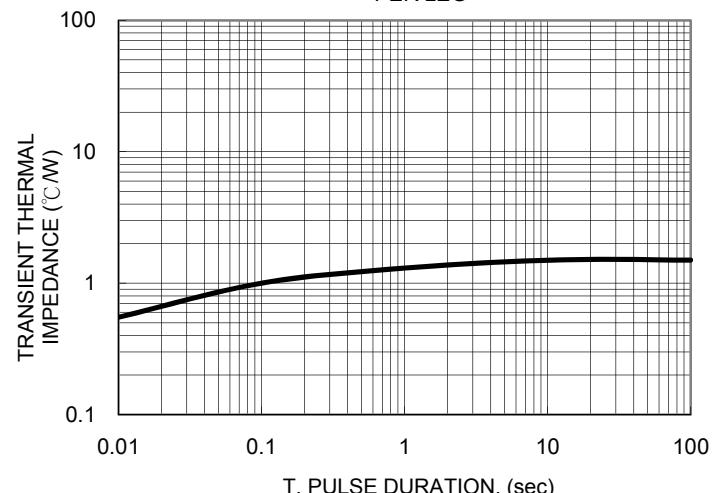
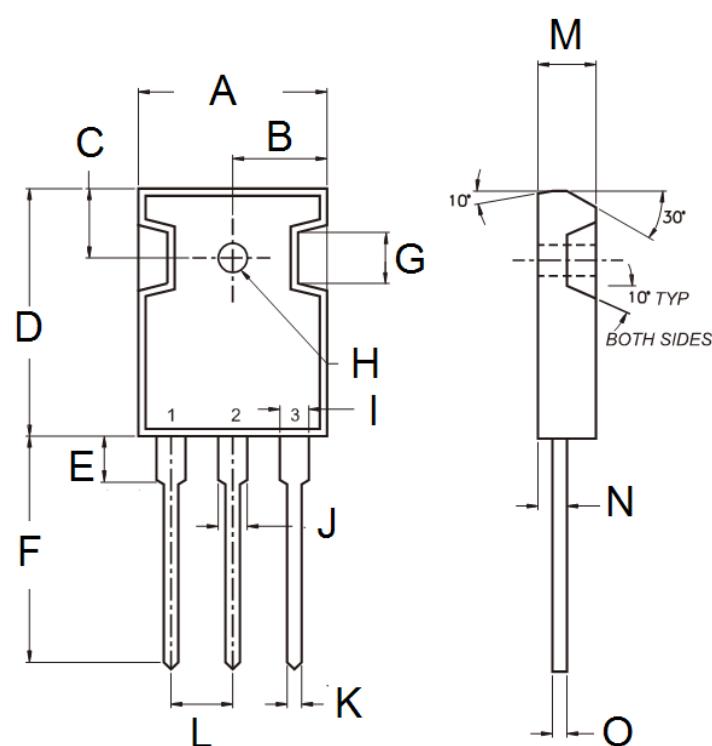


FIG. 5- TYPICAL JUNCTION CAPACITANCE PER LEG

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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