imall

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16A, 20V - 150V Dual Common Cathode Schottky Rectifiers

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

MECHANICAL DATA

Case: TO-247AD (TO-3P)

Molding compound, UL flammability classification rating 94V-0 Part no. with suffix "H" means AEC-Q101 qualified Packing code with suffix "G" means green compound (halogen-free) **Terminal:** Matte tin plated leads, solderable per JESD22-B102 Meet JESD 201 class 2 whisker test **Polarity:** As marked **Mounting torque:** 10 in-lbs maximum **Weight:** 5.6 g (approximately)



PIN 2

-O CASE

PIN 1 O-

PIN 3O-





MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)										
	SYMBOL	SR 1620	SR 1630	SR 1640	SR 1650	SR 1660	SR 1690	SR 16100	SR 16150	UNIT
		РТ	РТ	РТ	РТ	РТ	РТ	РТ	РТ	
Maximum repetitive peak reverse voltage		20	30	40	50	60	90	100	150	V
Maximum RMS voltage		14	21	28	35	42	63	70	105	V
Maximum DC blocking voltage		20	30	40	50	60	90	100	150	V
Maximum average forward rectified current		16					Α			
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load		200				А				
Maximum instantaneous forward voltage (Note 1) $_{\rm F}$ = 8 A		0.55 0.70		0.90		1.00	V			
J=25°C		0.5 0.1								
_J =100°C	I _R	15		10					mA	
_J =125°C				-				5		
Typical thermal resistance		3.0					°C/W			
Operating junction temperature range		- 55 to +125 - 55 to +150				°C				
Storage temperature range		- 55 to +150				°C				
	nalf sine-wave	$\begin{tabular}{ c c c c } \hline SYMBOL \\ \hline V_{RRM} \\ \hline V_{RMS} \\ \hline V_{DC} \\ \hline I_{F(AV)} \\ \hline alf sine-wave \\ I_{FSM} \\ \hline Iote 1) \\ V_F \\ J=25^{\circ}C \\ J=100^{\circ}C \\ \hline I_R \\ \hline \end{tabular}$	$\begin{array}{c c c c c c c c } & & & & & & & & & & & & & & & & & & &$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c } & & & & & & & & & & & & & & & & & & &$	$\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 c c c c c c c c c c c c $	$\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 c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

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



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ORDERING INFORMATION PART NO. PACKING CODE PACKING CODE PACKAGE PACKING PART NO. SUFFIX (*) SUFFIX SR16xxPT G ITO-220AB Н C0 50 / Tube (Note 1)

Note 1: "xx" defines voltage from 20V (SR1620PT) to 150V (SR16150PT)

*: Optional available

100

10

1

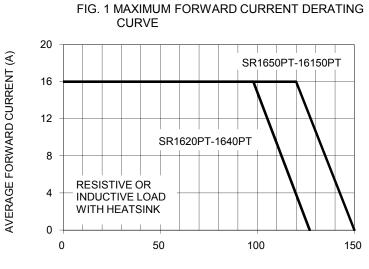
0.1 L 0.1

INSTANTANEOUS FORWARD CURRENT(A)

EXAMPLE						
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION	
SR1660PTHC0G	SR1660PT	Н	C0	G	AEC-Q101 qualified Green compound	

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)





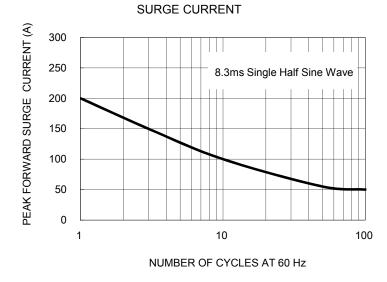
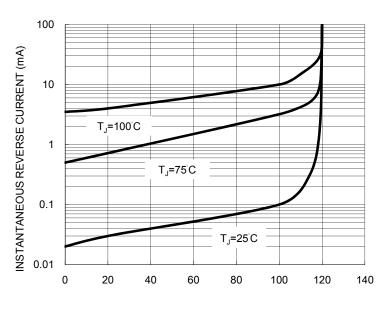


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD

FIG. 4 TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE. (%)

CHARACTERISTICS
Pulse Width=300µs
1% Duty cycle
SR1690PT-16100PT

SR1620PT-1640PT

SR1650PT-1660PT

FIG. 3 TYPICAL INSTANTANEOUS FORWARD

SR16150PT

0.8

0.9

1.0

Document Number: DS_D1309025

0.2

0.3

0.4

0.5

0.6

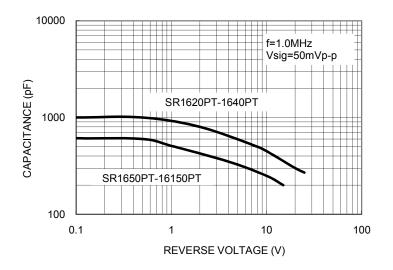
INSTANTANEOUS FORWARD VOLTAGE. (V)

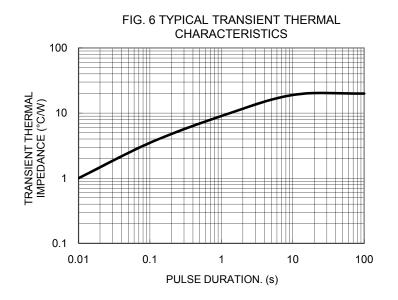
0.7



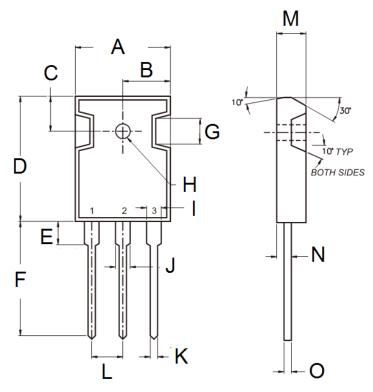
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FIG. 5 TYPICAL JUNCTION CAPACITANCE





PACKAGE OUTLINE DIMENSIONS TO-247AD (TO-3P)



P/N

YWW

G

F

DIM.	Unit	(mm)	Unit (inch)			
DIN.	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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