

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


TO-247AD (TO-3P)


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 _A =25℃ unless otherwise noted)										
PARAMETER	SYMBOL	MBR 3035 PT	MBR 3045 PT	MBR 3050 PT	MBR 3060 PT	MBR 3090 PT	MBR 30100 PT	MBR 30150 PT	MBR 30200 PT	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	35	45	50	60	90	100	150	200	V
Maximum RMS voltage	V _{RMS}	24	31	35	42	63	70	105	140	V
Maximum DC blocking voltage	V _{DC}	35	45	50	60	90	100	150	200	V
Maximum average forward rectified current	I _{F(AV)}	30								A
Peak repetitive forward current (Rated V _R , Square wave, 20KHz)	I _{FRM}	30								A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	200								A
Peak repetitive reverse surge Current (Note 1)	I _{RRM}	2		1						A
Maximum instantaneous forward voltage (Note 2) I _F =15A, T _J =25℃ I _F =15A, T _J =125℃ I _F =30A, T _J =25℃ I _F =30A, T _J =125℃	V _F	-		0.75		0.85		0.95	1.05	V
		0.60		0.65		0.75		0.92	-	
		0.82		-		-		1.02	1.10	
		0.73		-		-		0.98	-	
Maximum reverse current @ rated VR T _J =25 °℃ T _J =125 °℃	I _R	1				0.5			0.1	mA
		20		15		10				
Voltage rate of change,(Rated V _R)	dV/dt	10,000								V/μs
Typical thermal resistance	R _{θJC}	1.4								°C/W
Operating junction temperature range	T _J	- 55 to +150								°C
Storage temperature range	T _{STG}	- 55 to +150								°C

Note 1: 2.0μs Pulse Width, f=1.0KHz

Note 2: Pulse Test : 300μs Pulse Width, 1% Duty Cycle

ORDERING INFORMATION

PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
MBR30xxPT (Note 1)	Prefix "H"	C0	Suffix "G"	TO-3P	30 / Tube

Note 1: "xx" defines voltage from 35V (MBR3035PT) to 200V (MBR30200PT)

EXAMPLE

PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
MBR3060PT C0	MBR3060PT		C0		
MBR3060PT C0G	MBR3060PT		C0	G	Green compound
MBR3060PTH0	MBR3060PT	H	C0		AEC-Q101 qualified

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1 FORWARD CURRENT DERATING CURVE

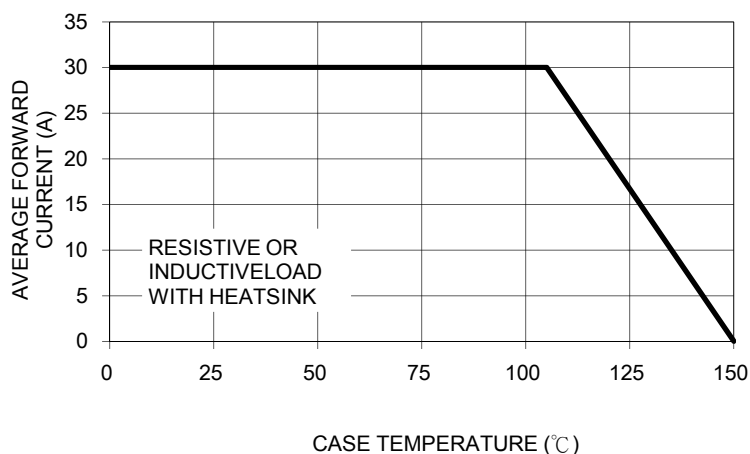


FIG. 2 MAXIMUM FORWARD SURGE CURRENT PER LEG

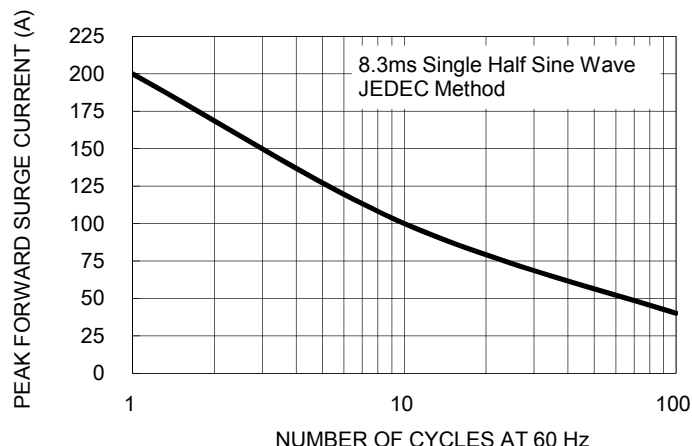


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

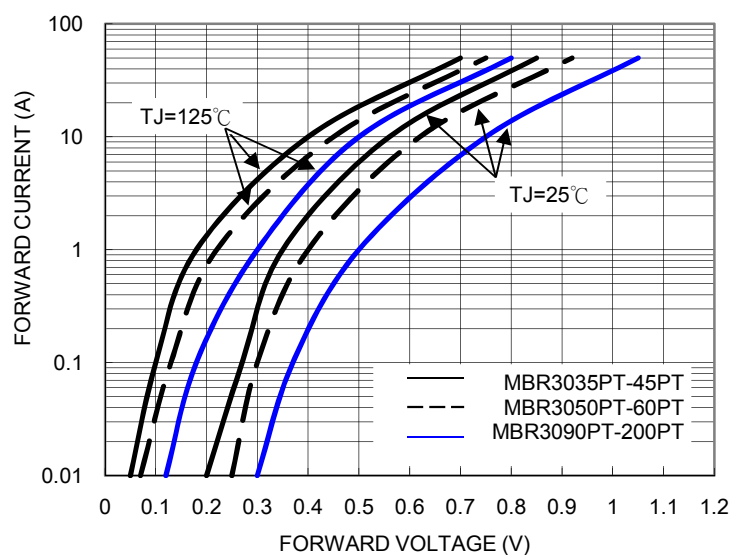


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

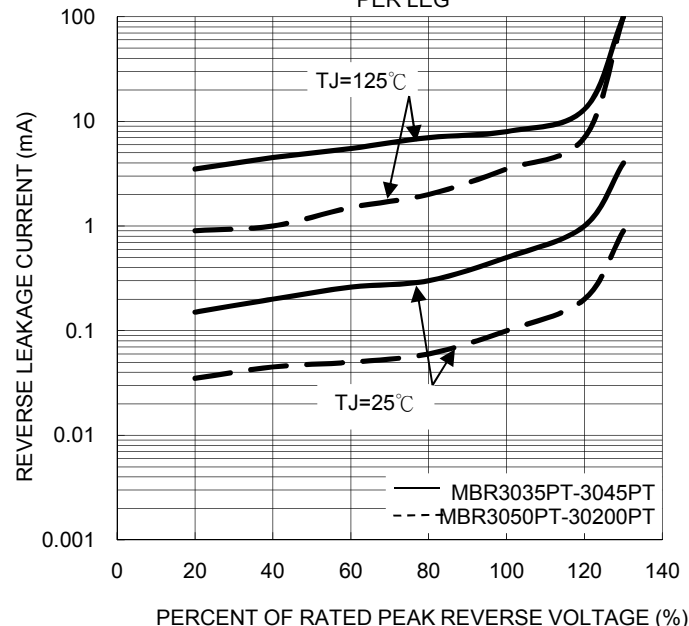


FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG

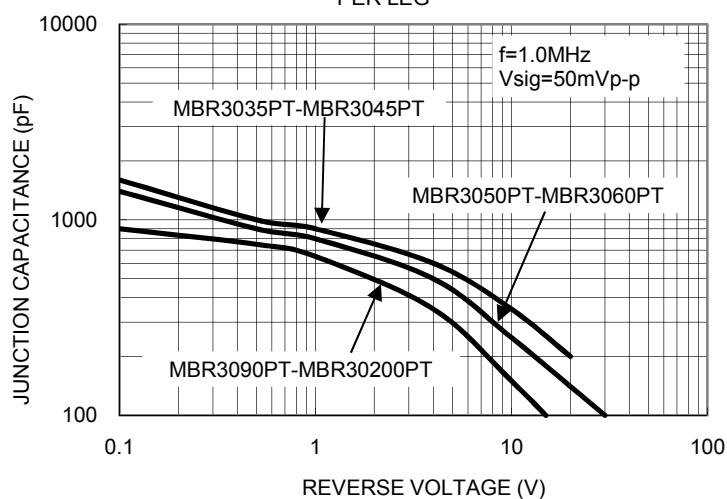
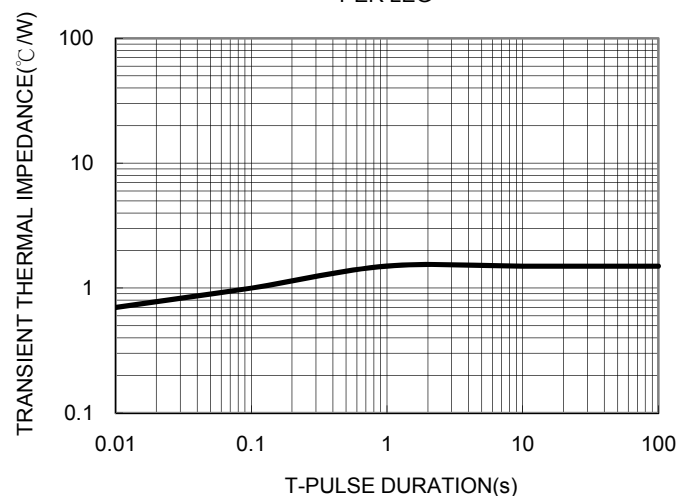
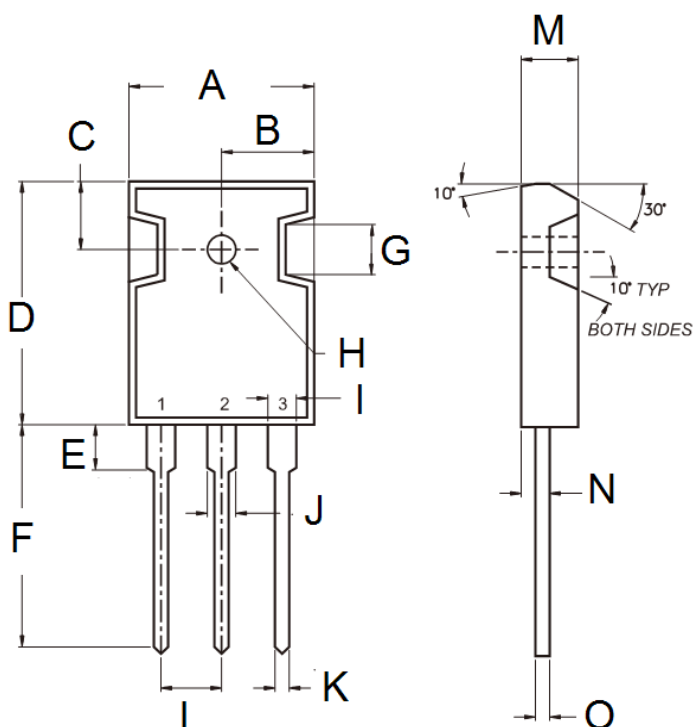


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG



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

Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.