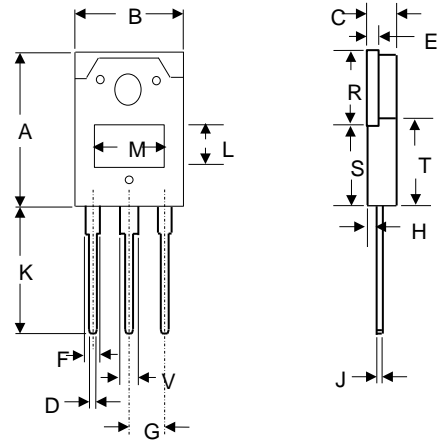


Features

- * Low power loss, high efficiency
- * Guardring for overvoltage protection
- * High surge current capability



RoHS
COMPLIANT



Mechanical Data

- * Case: TO-3P
- * Molding compound, UL flammability classification rating 94V-0
- * 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: 6.1 g (approximately)

DIM	TO-3P			
	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.771	0.795	19.60	20.20
B	0.606	0.622	15.40	15.80
C	0.181	0.197	4.60	5.00
D	0.044	0.048	1.12	1.22
E	0.058	0.060	1.48	1.52
F	0.071	0.086	1.80	2.20
G	0.208	0.220	5.30	5.60
H	0.051	0.059	1.30	1.50
J	0.021	0.026	0.55	0.65
K	0.787	0.811	20.00	20.60
L	0.342	0.358	8.70	9.10
M	0.421	0.437	10.70	11.10
R	0.267	0.283	6.80	7.20
S	0.500	0.515	12.70	13.10
T	0.539	0.551	13.70	14.00
V	0.110	0.126	2.80	3.20

Maximum Ratings And Electrical Characteristics (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	MBR 4035 PT	MBR 4045 PT	MBR 4050 PT	MBR 4060 PT	MBR 4090 PT	MBR 40100 PT	MBR 40150 PT	MBR 40200 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



MBR4035PT thru MBR40200PT

Dual Common Cathode Schottky Rectifiers

Maximum Ratings And Electrical Characteristics (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	MBR 4035 PT	MBR 4045 PT	MBR 4050 PT	MBR 4060 PT	MBR 4090 PT	MBR 40100 PT	MBR 40150 PT	MBR 40200 PT	UNIT
Maximum average forward rectified current	I _{F(AV)}	40								A
Peak repetitive forward current (Rated V _R , Square wave, 20KHz)	I _{FRM}	40								A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	330								A
Peak repetitive reverse surge Current (Note 1)	I _{RRM}	2	1							A
Maximum instantaneous forward voltage (Note 2) I _F =20A, T _J =25°C I _F =20A, T _J =125°C I _F =40A, T _J =25°C I _F =40A, T _J =125°C	V _F	0.75 0.65 0.80 0.75		0.77 0.67 ---		0.84 0.74 ---		0.90 0.80 1.01 ---		V
Maximum reverse current @ rated V _R T _J =25 °C	I _R	1				0.5		0.1		mA
T _J =125 °C		30		20		10				
Voltage rate of change (Rated V _R)	dV/dt	10,000								V/μs
Typical thermal resistance	R _{θJC}	1.2								°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

Ratings and Characteristic Curves

FIG.1- FORWARD CURRENT DERATING CURVE

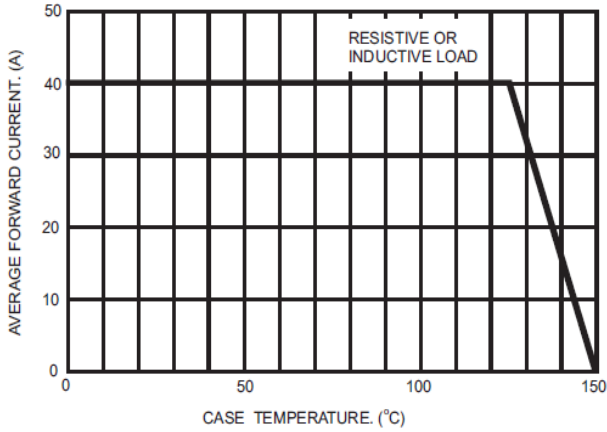


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

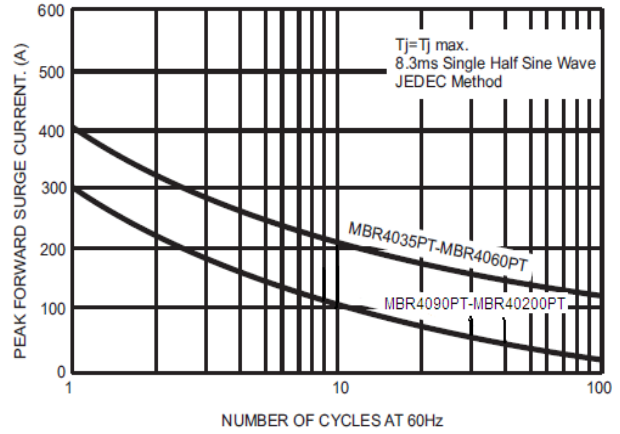


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

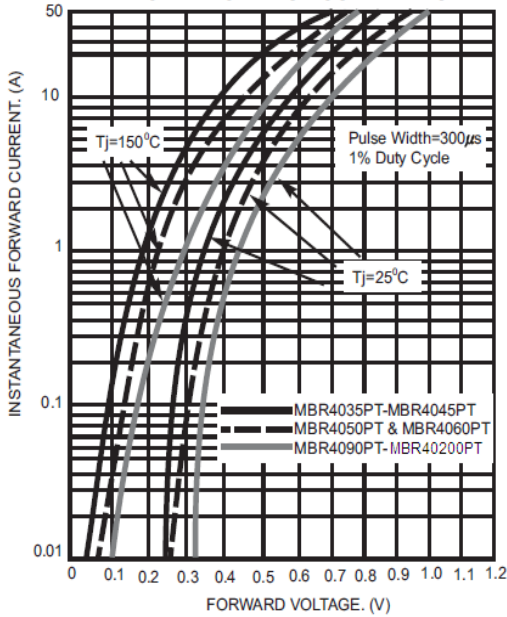


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

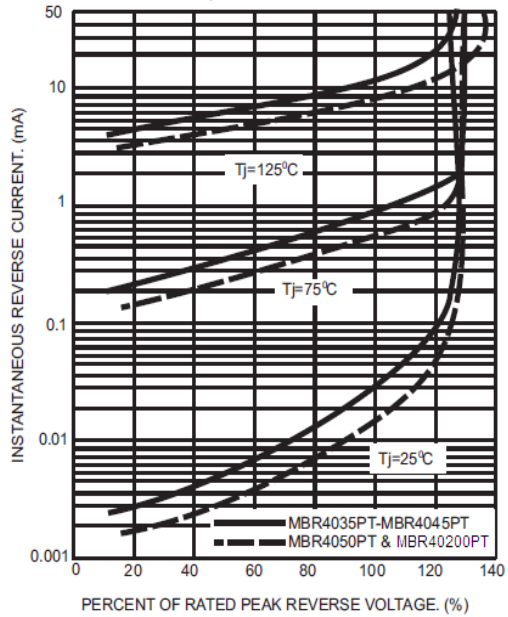


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

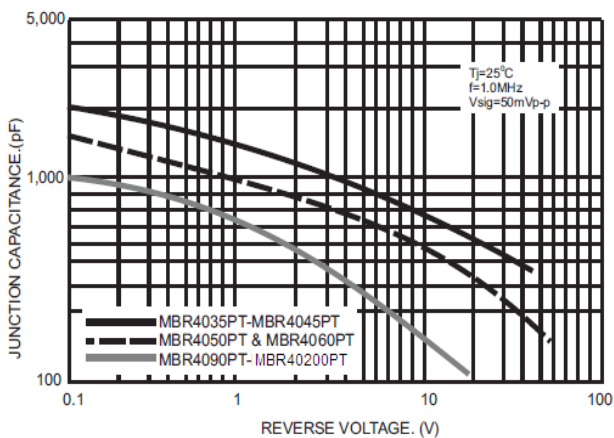
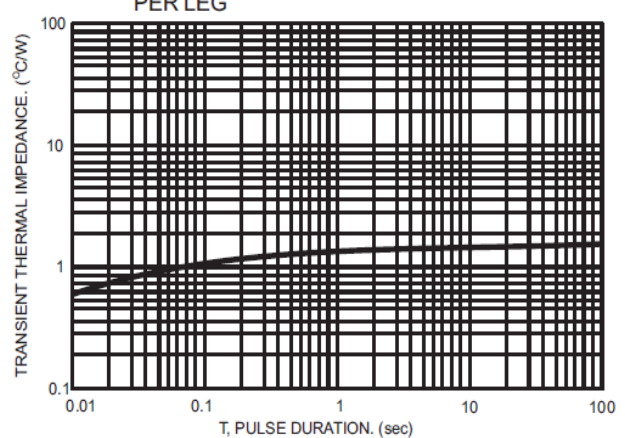


FIG.6- TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG





MBR4035PT thru MBR40200PT

Dual Common Cathode Schottky Rectifiers

Ordering Information

Part No.	Package	Packing Code	Packing
MBR4035PT thru MBR40200PT	TO-3P	TXB	30pcs/Tube

Disclaimer

Specifications of the products displayed herein are subject to change without notice. JGD or anyone on its behalf, assumes no responsibility or liability for any errors or 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 JGD's terms and conditions of sale for such products, JGD assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of JGD 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 JGD for any damages resulting from such improper use or sale.