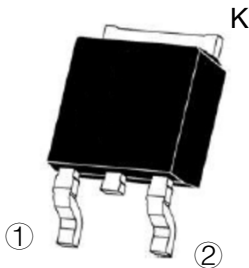
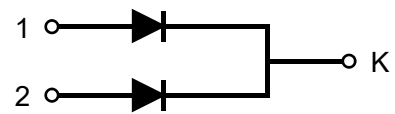


Feature

- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High temperature soldering guaranteed
- Mounting position: any



TO-263-2L (Top View)



Circuit Diagram

Maximum Ratings and Thermal Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	PSBDD2 P40V40	PSBDD2 P45V40	PSBDD2 P60V40	PSBDD2 P100V40	PSBDD2 P150V40	PSBDD2 P200V40	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	45	60	100	150	200	V
Maximum RMS voltage	V_{RMS}	28	31.5	42	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	60	100	150	200	V
Maximum Average Forward Rectified Current per diode per device	$I_{F(AV)}$	20 40						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	250						A
Maximum Forward Voltage at 20 A	V_F	0.75		0.80	0.88	0.92	0.95	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	I_R	0.1 20			0.05 20			mA
Typical Junction Capacitance Per Element ¹⁾	C_J	800		600				pF
Typical Thermal Resistance	$R_{\theta JA}$	45						$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55~+150				-55~+175		$^\circ\text{C}$

Notes:

- 1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

Typical Characteristics

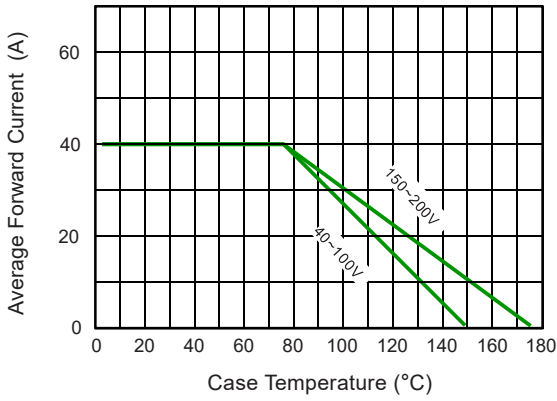


Fig.1 Typical Forward Current Derating Curve

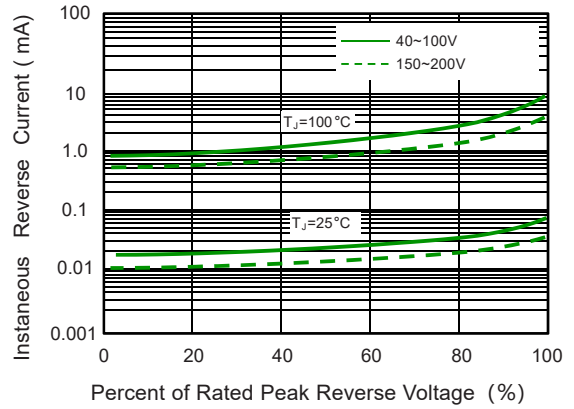


Fig.2 Typical Reverse Characteristics

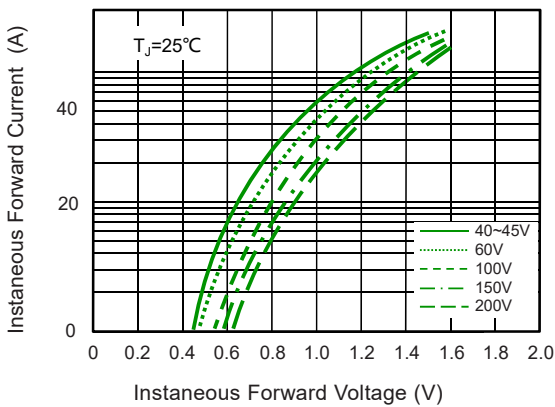


Fig.3 Typical Forward Characteristic(per leg)

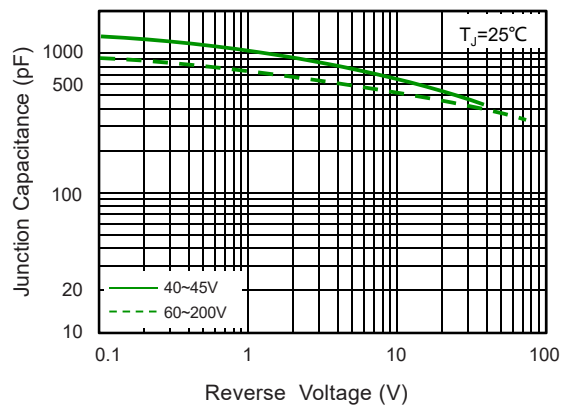


Fig.4 Typical Junction Capacitance

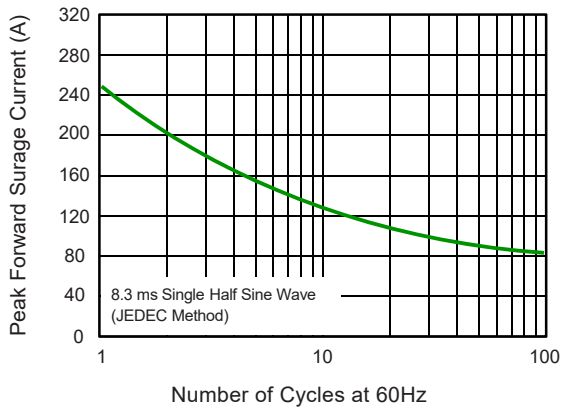


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

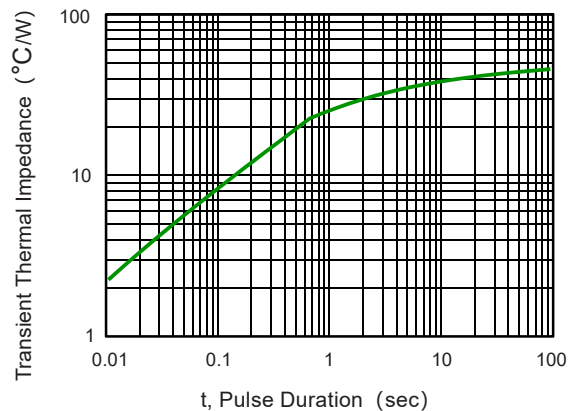
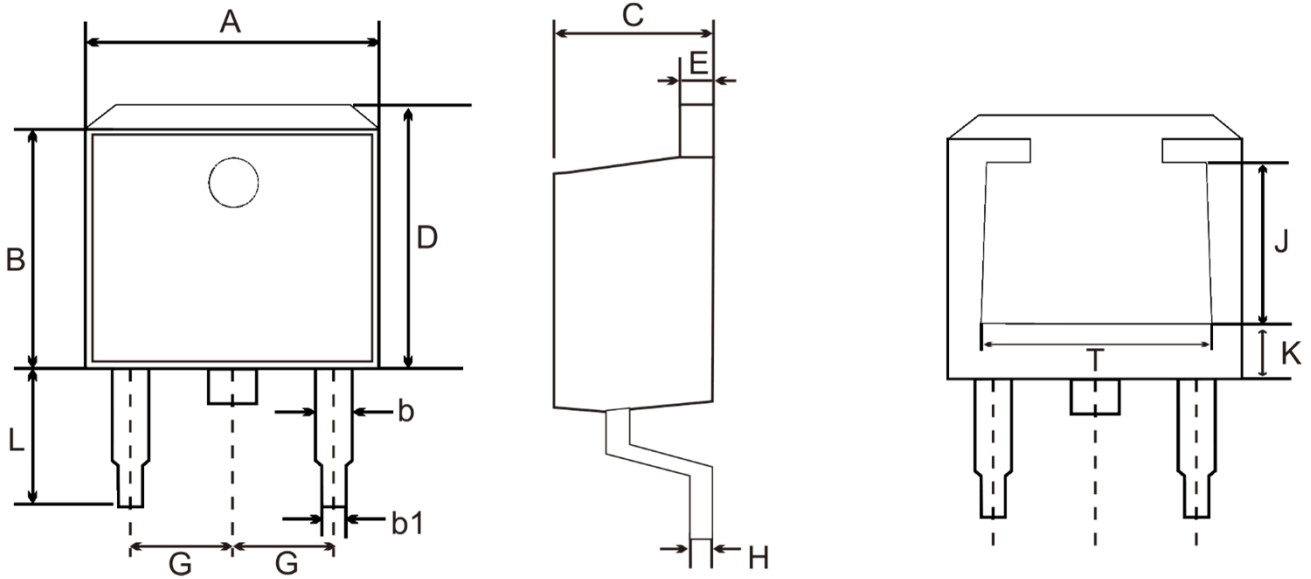


Fig.6 Typical Transient Thermal Impedance


Schottky Barrier Rectifiers

Product dimension (TO-263-2L)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	9.80	10.40	0.386	0.409
B	8.50	9.10	0.335	0.358
b	1.00	1.40	0.039	0.055
b1	-	0.90	-	0.035
C	4.40	4.80	0.173	0.189
D	9.60	10.60	0.378	0.417
E	1.20	1.40	0.047	0.055
G	2.35	2.75	0.093	0.108
H	0.30	0.70	0.012	0.028
L	5.00	6.00	0.197	0.236
J	4.65 Ref.		0.183 Ref.	
T	7.70 Ref.		0.303 Ref.	
K	3.22 Ref.		0.127 Ref.	


IMPORTANT NOTICE

 and **Prisemi**[®] are registered trademarks of **Prisemi Electronics Co., Ltd** (Prisemi), Prisemi reserves the right to make changes without further notice to any products herein. Prisemi makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Prisemi assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. “Typical” parameters which may be provided in Prisemi data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including “Typicals” must be validated for each customer application by customer’s technical experts. Prisemi does not convey any license under its patent rights nor the rights of others. The products listed in this document are designed to be used with ordinary electronic equipment or devices, Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

Website: <http://www.prisemi.com>

For additional information, please contact your local Sales Representative.

©Copyright 2009, Prisemi Electronics

 **Prisemi**[®] is a registered trademark of Prisemi Electronics.

All rights are reserved.