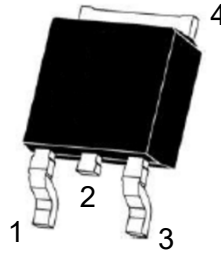
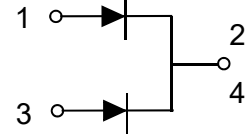


Feature

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



TO-252



Circuit Diagram

Maximum Ratings and Thermal Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	PSBDDP 40V10	PSBDDP 45V10	PSBDDP 60V10	PSBDDP 100V10	PSBDDP 150V10	PSBDDP 200V10	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	40	45	60	100	150	200	V
Maximum RMS voltage	V _{RMS}	28	32	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)}	5.0 10						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	100						A
Maximum Forward Voltage at 5.0 A	V _F	0.70		0.75	0.85	0.90	0.92	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _a = 25 °C T _a = 125 °C	I _R	0.1 20			0.05 20			mA
Typical Junction Capacitance Per Element ¹⁾	C _J	600		400				pF
Typical Thermal Resistance ²⁾	R _{θJA}	35						°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55~+150				-55~+175		°C

Notes:

- 1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- 2) Mounted on 10cm x 10cm x 1mm copper pad area

Typical Characteristics

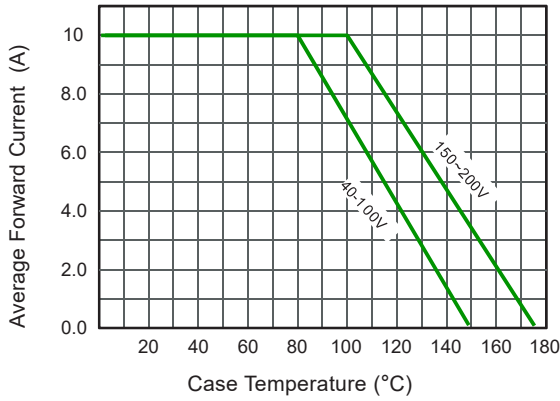


Fig.1 Typical Forward Current Derating Curve

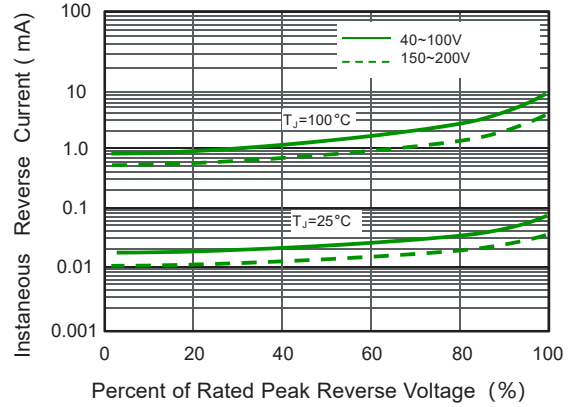


Fig.2 Typical Reverse Characteristics

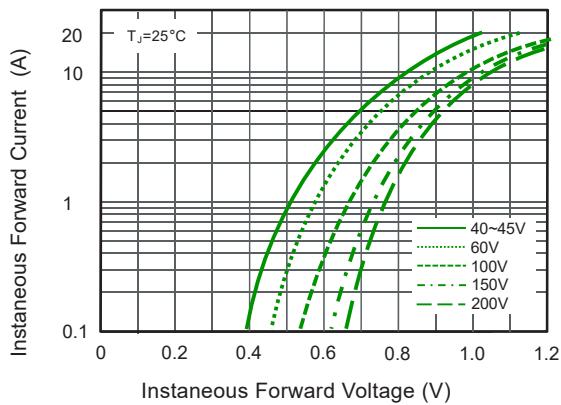


Fig.3 Typical Forward Characteristic

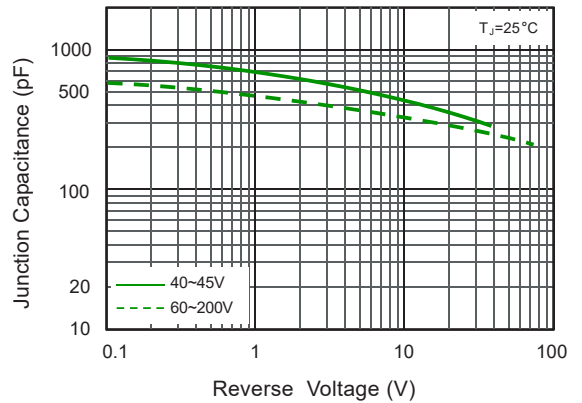


Fig.4 Typical Junction Capacitance

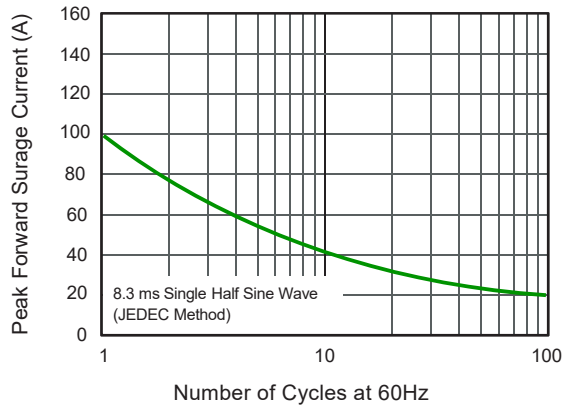


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

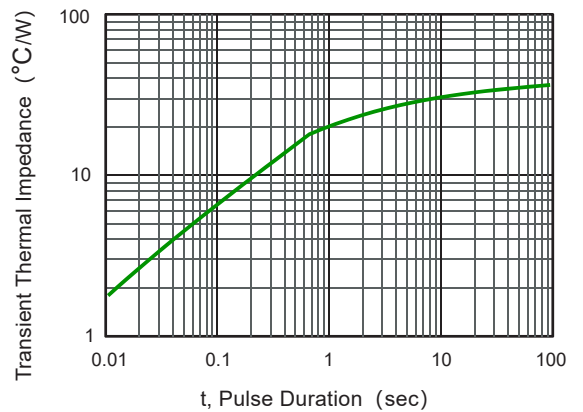
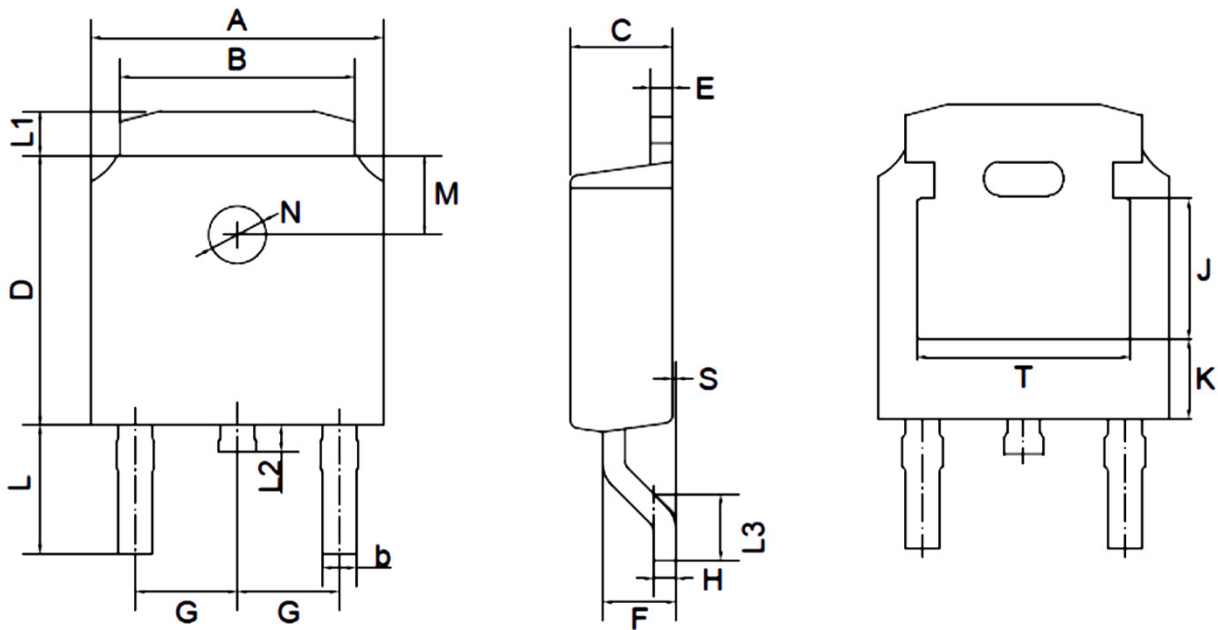


Fig.6 Typical Transient Thermal Impedance


Schottky Barrier Rectifiers

Product dimension (TO-252)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	6.30	6.70	0.248	0.264
B	5.10	5.50	0.201	0.217
b	0.30	0.80	0.012	0.031
C	2.10	2.50	0.083	0.098
D	5.90	6.30	0.232	0.248
E	0.40	0.60	0.016	0.024
F	1.30	1.80	0.051	0.071
G	2.29 Typ.		0.090 Typ.	
H	0.45	0.55	0.018	0.022
L	2.70	3.10	0.106	0.122
L1	0.80	1.20	0.031	0.047
L2	0.60	1.00	0.024	0.039
L3	1.00	1.75	0.039	0.069
S	0.00	0.23	0.000	0.009
M	1.80 Typ.		0.071 Typ.	
N	1.30 Typ.		0.051 Typ.	
J	3.16 Ref.		0.124 Ref.	
K	1.80 Ref.		0.071 Ref.	
T	4.83 Ref.		0.190 Ref.	


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