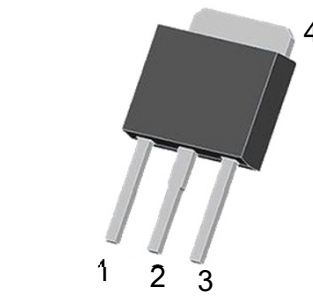
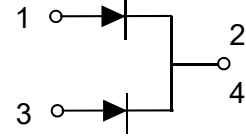


## Feature

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



TO-251



Circuit Diagram

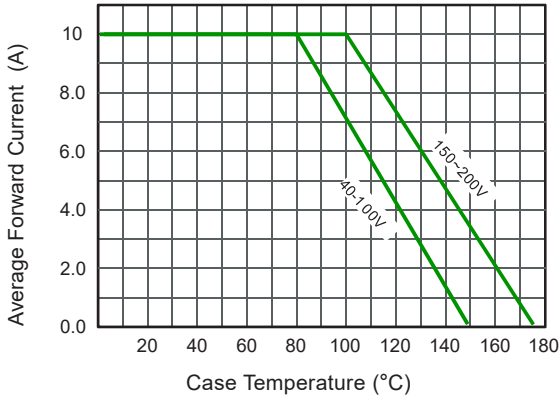
## Maximum Ratings and Thermal Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	PSBDIP4 0V20	PSBDIP4 5V20	PSBDIP6 0V20	PSBDIP1 00V20	PSBDIP1 50V20	PSBDIP2 00V20	Units	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	40	45	60	100	150	200	V	
Maximum RMS voltage	V <sub>RMS</sub>	28	32	42	70	105	140	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	45	60	100	150	200	V	
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	Per diode: 10 Per device: 20						A	
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I <sub>FSM</sub>	130						A	
Maximum Forward Voltage at 10 A	V <sub>F</sub>	0.70		0.75	0.85	0.90	0.92	V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	T <sub>a</sub> = 25 °C: 0.1 T <sub>a</sub> = 125 °C: 20			0.05 20			mA	
Typical Junction Capacitance Per Element <sup>1)</sup>	C <sub>J</sub>	600		400				pF	
Typical Thermal Resistance <sup>2)</sup>	R <sub>θJA</sub>	35						°C/W	
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55~+150				-55~+175			°C

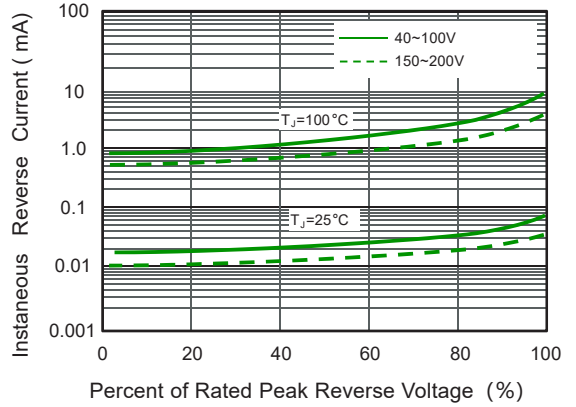
Notes:

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

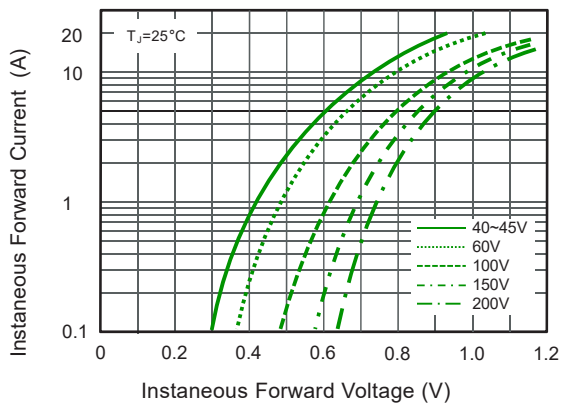
## Typical Characteristics



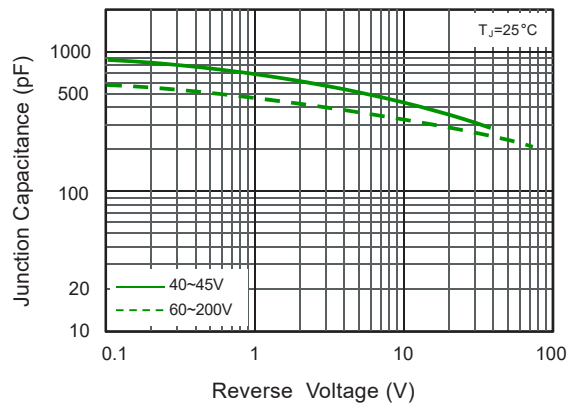
**Fig.1 Typical Forward Current Derating Curve**



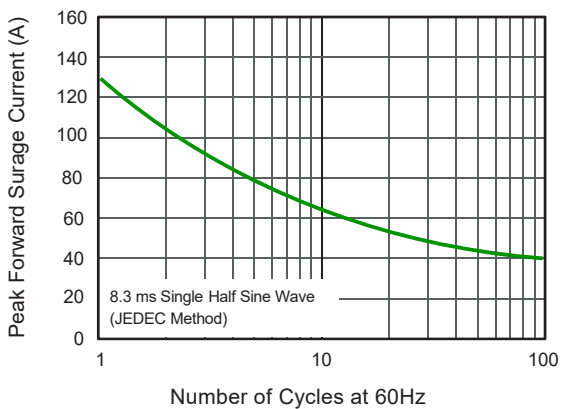
**Fig.2 Typical Reverse Characteristics**



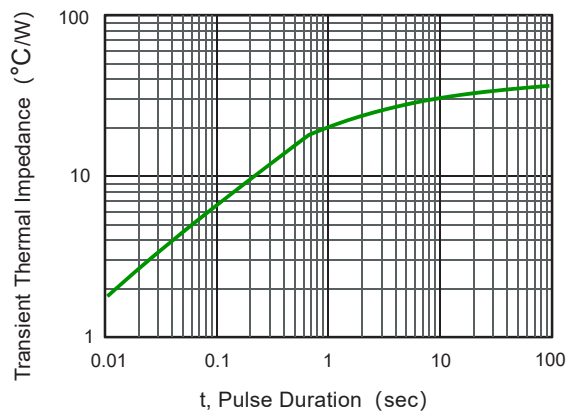
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



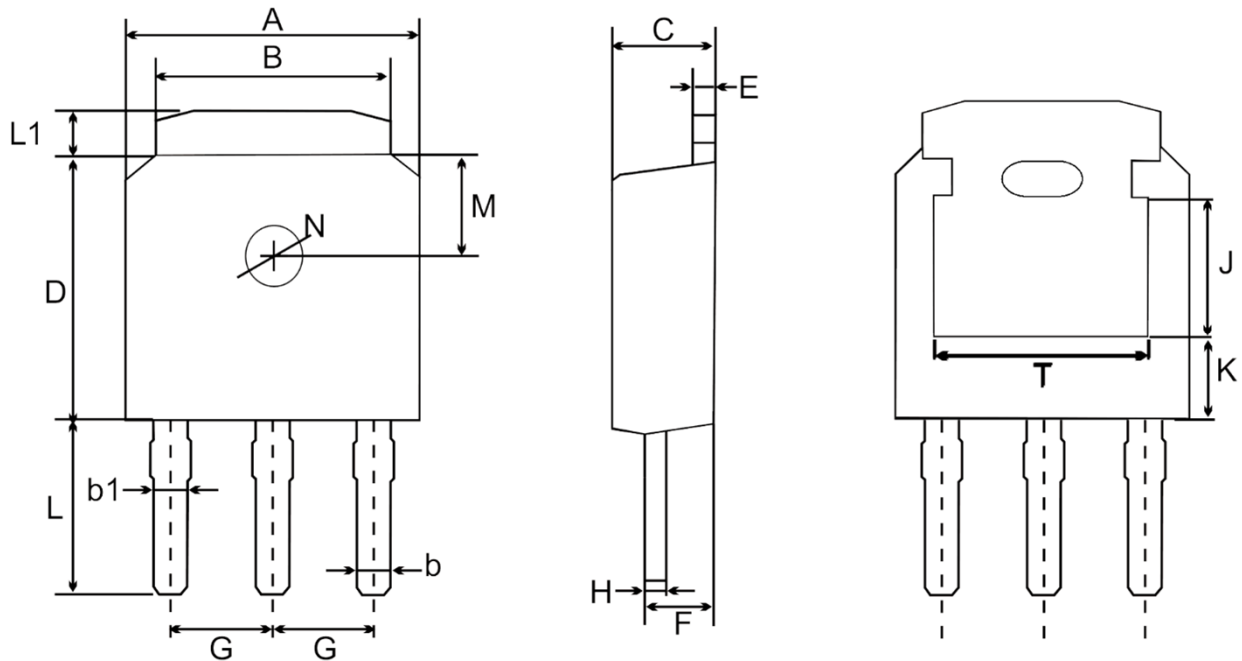
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6 Typical Transient Thermal Impedance**


# Schottky Barrier Rectifiers

## Product dimension (TO-251)



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
b1	0.76	0.90	0.030	0.035
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	3.90	4.30	0.154	0.169
L1	0.80	1.20	0.031	0.047
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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