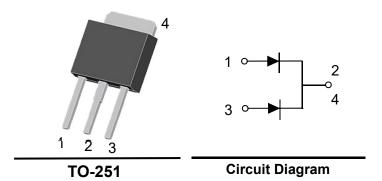


PSBDIPxxV10 Series Schottky Barrier Rectifiers

Feature

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



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

Parameter	Symbol	PSBDIP4 0V10	PSBDIP4 5V10	PSBDIP6 0V10	PSBDIP1 00V10	PSBDIP1 50V10	PSBDIP2 00V10	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 Per diode Rectified Current Per device	I _{F(AV)}	5.0 10					А	
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	100					А	
Maximum Forward Voltage at 5.0 A	V _F	0.	70	0.75 0.85 0.90 0.92		0.92	V	
Maximum DC Reverse Current $T_a = 25 ^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_a = 125 ^{\circ}\text{C}$	I _R		0.1 20	0.05 20		mA		
Typical Junction Capacitance Per Element ¹⁾	CJ	600 400			pF			
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	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

Schottky Barrier Rectifiers

Typical Characteristics

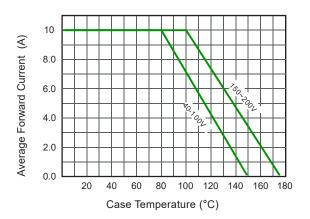


Fig.1 Typical Forward Current Derating Curve

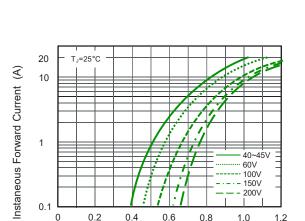


Fig.3 Typical Forward Characteristic

Instaneous Forward Voltage (V)

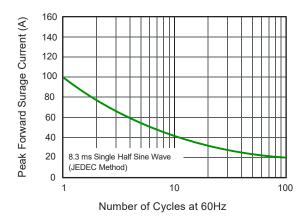


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

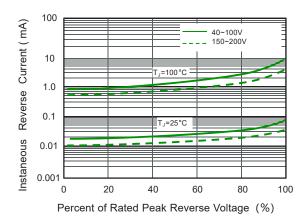


Fig.2 Typical Reverse Characteristics

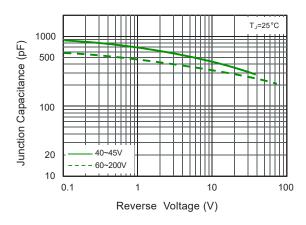


Fig.4 Typical Junction Capacitance

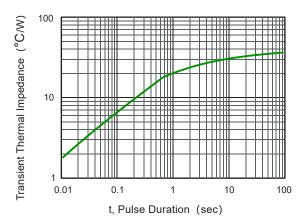
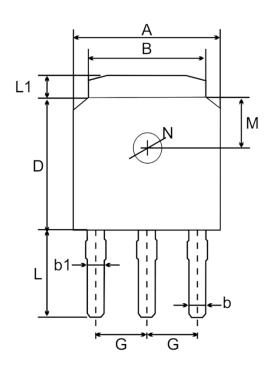
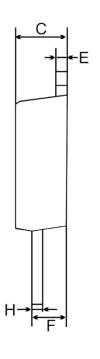
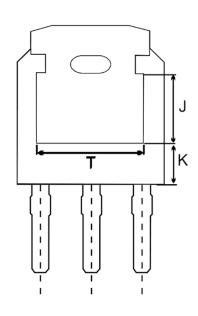


Fig.6- Typical Transient Thermal Impedance

Product dimension (TO-251)







Dim	Millim	neters	Inches			
	Min	Max	Min	Max		
Α	6.30	6.70	0.248	0.264		
В	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		
С	2.10	2.50	0.083	0.098		
D	5.90	6.30	0.232	0.248		
Е	0.40	0.60	0.016	0.024		
F	1.30	1.80	0.051	0.071		
G	2.29	Тур.	0.090 Тур.			
Н	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		
М	1.80	Тур.	0.071 Typ.			
N	1.30	Тур.	0.051 Typ.			
J	3.16	Ref.	0.124 Ref.			
K	1.80	Ref.	0.071 Ref.			
Т	4.83	Ref.	0.190 Ref.			

Schottky Barrier Rectifiers

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