

PSBDIP65V5S

Low VF Schottky Barrier Rectifiers

Feature

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





TO-251 (Top View)

Circuit Diagram

Absolute maximum rating@25°C

Rating	Symbol	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	65	V
Maximum RMS Voltage	V _{RMS}	46	V
Maximum DC Blocking Voltage	V_{DC}	65	V
Maximum Average Forward Rectified Current	I _{F(AV)}	5	А
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	150	А
Typical Junction Capacitance ¹⁾	CJ	500	pF
Typical thermal resistance ²⁾	R _{eJA}	50	°C/W
Junction and Storage Temperature Range	$T_{J,}T_{STG}$	-55~+150	°C

Notes:

1.Measured at 1 MHz and applied reverse voltage of 4 V D.C

2. Mounted on infinite heat sink..

Electrical characteristics per line@25°C (unless otherwise specified)

Parameter	Symbol	Conditions		Min.	Тур.	Max.	Units
Breakdown Voltage	V _{BR}	I _R = 0.5mA		65	-	-	V
Instantaneous Forward Voltage	V _F	I _F = 1A		-	0.39	-	V
		I _F = 2A		-	0.43	-	
		I _F = 5A		-	0.5	0.55	
	I _R	V _R = 36V		-	5.0	-	μA
Reverse Current		V _R = 60V	T _J = 25°C	-	-	50	μA
			T _J = 100°C	-	12	-	mA

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Typical Characteristics



Fig.1 Typical Forward Current Derating Curve



Fig.3 Typical Forward Characteristic



Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

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Fig.2 Typical Reverse Characteristics



Fig.4 Typical Junction Capacitance

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Product Dimension (TO-251)



Dim	Millim	neters	Inches		
	Min	Мах	Min	Мах	
А	6.30	6.70	0.248	0.264	
В	5.10	5.50	0.201	0.217	
b	0.66	0.86	0.026	0.033	
С	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 Тур.		0.090 Тур.		
н	0.45	0.55	0.018	0.022	
L	3.90	4.30	0.106	0.122	
L1	0.80	1.20	0.031	0.047	
b1	0.76	0.90	0.024	0.039	
М	1.80 Тур.		0.071 Typ.		
N	1.30 Тур.		0.051 Typ.		

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