

1PS50-03WS

General purpose PIN diode

Features

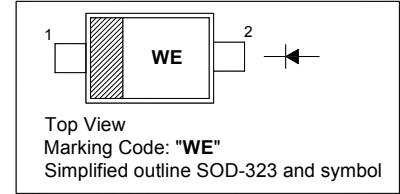
- Low forward resistance
- Low capacitance

Applications

- General RF applications

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

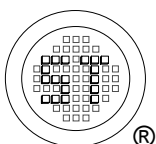


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	50	V
Continuous Forward Current	I_F	50	mA
Total Power Dissipation ($T_S = 90\text{ }^\circ\text{C}$)	P_{tot}	500	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

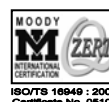
Electrical Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 50\text{ mA}$	V_F	-	1.1	V
Reverse Current at $V_R = 50\text{ V}$	I_R	-	100	nA
Reverse Voltage at $I_R = 10\text{ }\mu\text{A}$	V_R	50	-	V
Diode Capacitance at $V_R = 1\text{ V}$, $f = 1\text{ MHz}$ at $V_R = 5\text{ V}$, $f = 1\text{ MHz}$	C_d	- -	0.55 0.35	pF
Forward Resistance at $I_F = 0.5\text{ mA}$, $f = 100\text{ MHz}$ at $I_F = 1\text{ mA}$, $f = 100\text{ MHz}$ at $I_F = 10\text{ mA}$, $f = 100\text{ MHz}$	r_D	- - -	40 25 5	Ω

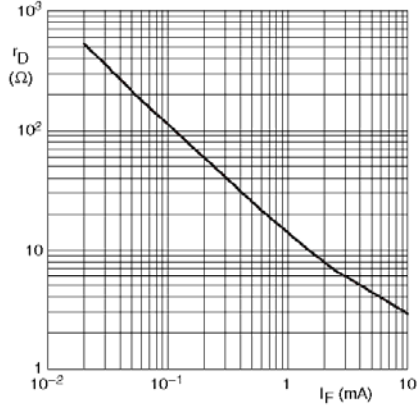


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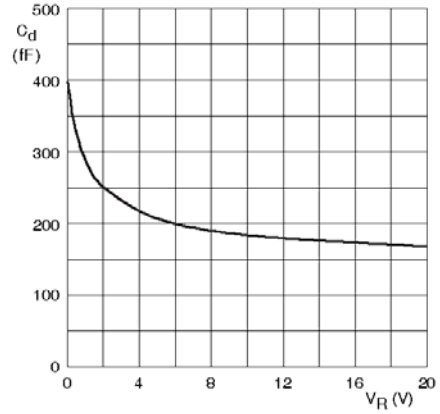


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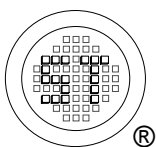
f = 100 MHz; $T_j = 25^\circ\text{C}$.

Forward resistance as a function of forward current; typical values.

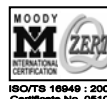


f = 1 MHz; $T_j = 25^\circ\text{C}$.

Diode capacitance as a function of reverse voltage; typical values.



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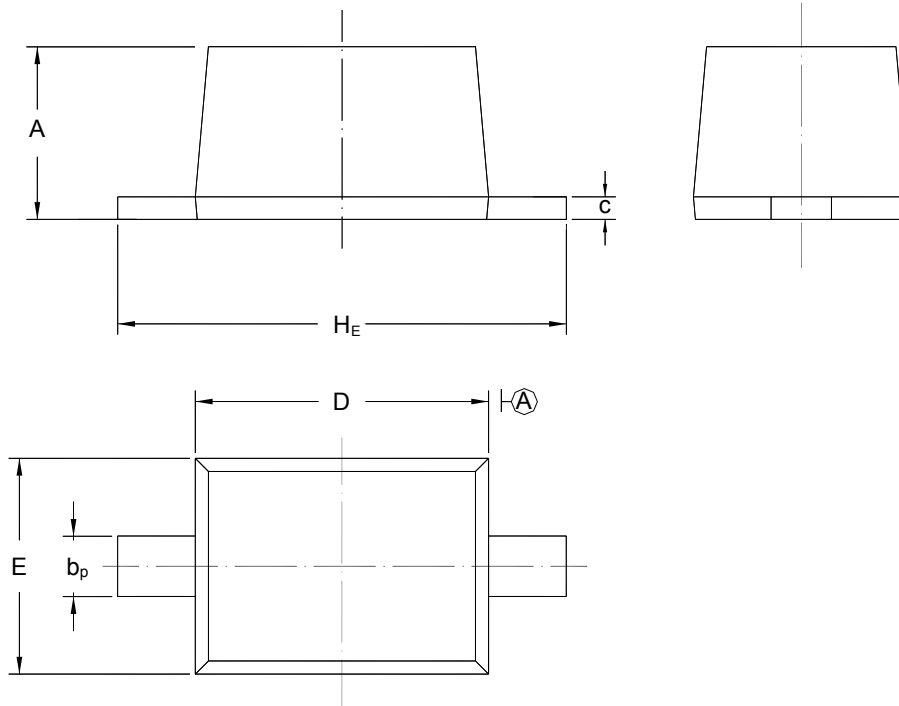


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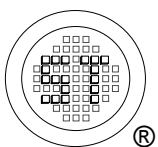
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

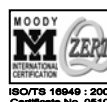
SOD-323



UNIT	A	b _p	C	D	E	H _E
mm	1.10 0.80	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30



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ISO/TS 16949:2002 Certificate No. 05103
 ISO 14001:2004 Certificate No. 7116
 ISO 9001:2000 Certificate No. 0506098
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