



MBR565DC-P8

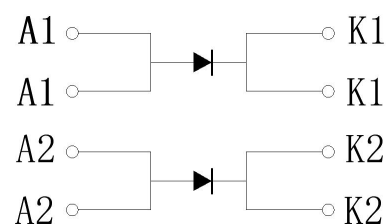
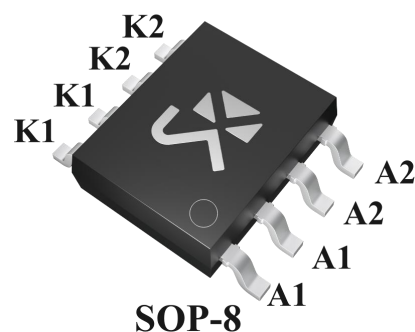
Surface Mount Schottky Barrier Rectifier

Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Descriptions

MBR565DC-P8 Is a Schottky diode chip manufactured by silicon epitaxial process; low reverse leakage and high reliability. The product is widely used for rectification, polar protection circuit, etc.



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

Parameter	Symbol	Limit	Unit
Peak repetitive reverse voltage	V_{RRM}	65	V
Forward current	$I_{F(AV)}$	5	A
Non repetitive peak surge current	I_{FSM}	125	A
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-40~150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Peak repetitive reverse voltage	V_{RRM}	$I_R=100\mu\text{A}$	65			V
Forward voltage	V_F	$I_F=3\text{A}$		0.52	0.62	V
		$I_F=5\text{A}$		0.62	0.70	V
Reverse current	I_R	$V_R=65\text{V}$			30	μA
Junction Capacity	C_J	$V_R=4\text{V}, f=1\text{MHz}$			215	pF

Thermal Characteristics

Parameter	Symbol	Value	Unit
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	40	$^{\circ}\text{C/W}$



MBR565DC-P8

Typical Characteristics

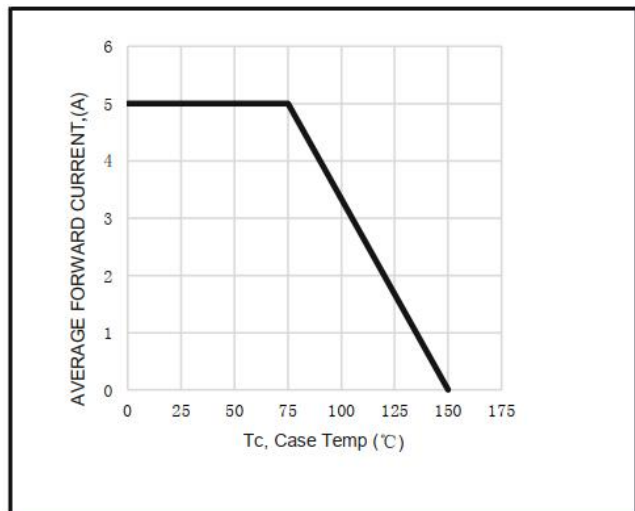


Fig.1-FORWARD CURRENT DERATING CURVE

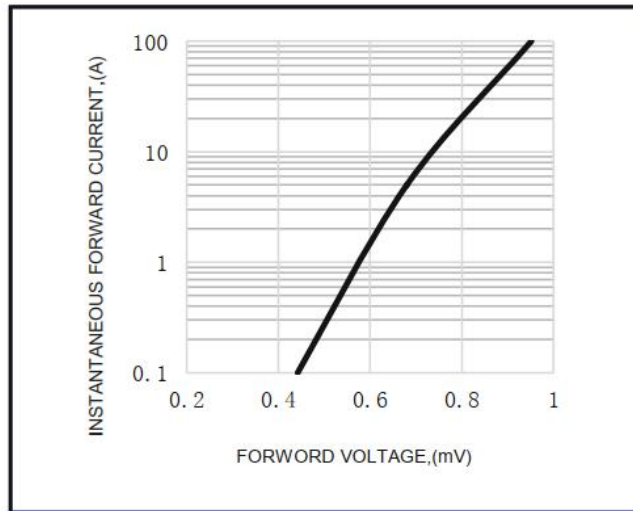


Fig.2- TYPICAL INSTANTANEOUS FORWARD

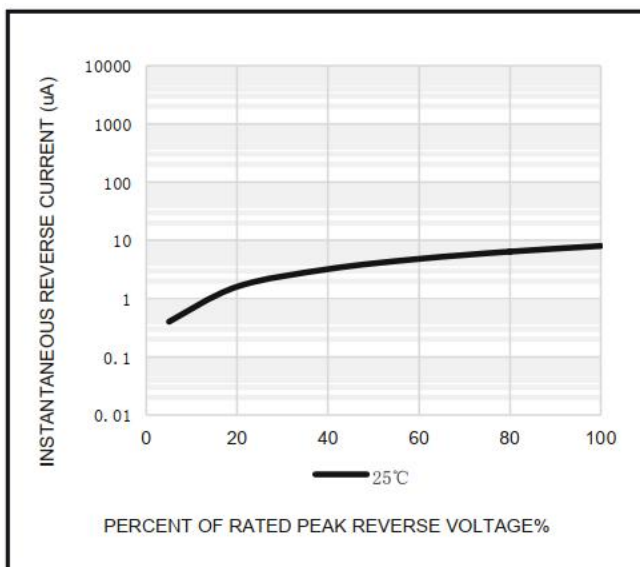


Fig.3- TYPICAL REVERSE CHARACTERISTICS

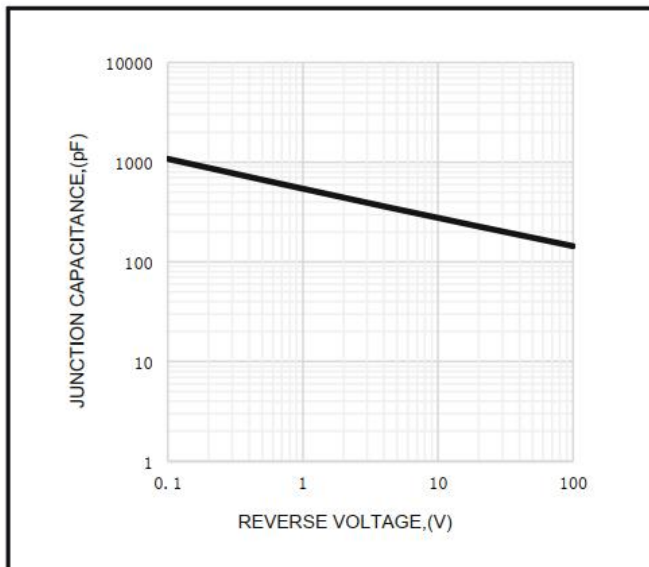


Fig.4-TYPICAL JUNCTION CAPACITANCE

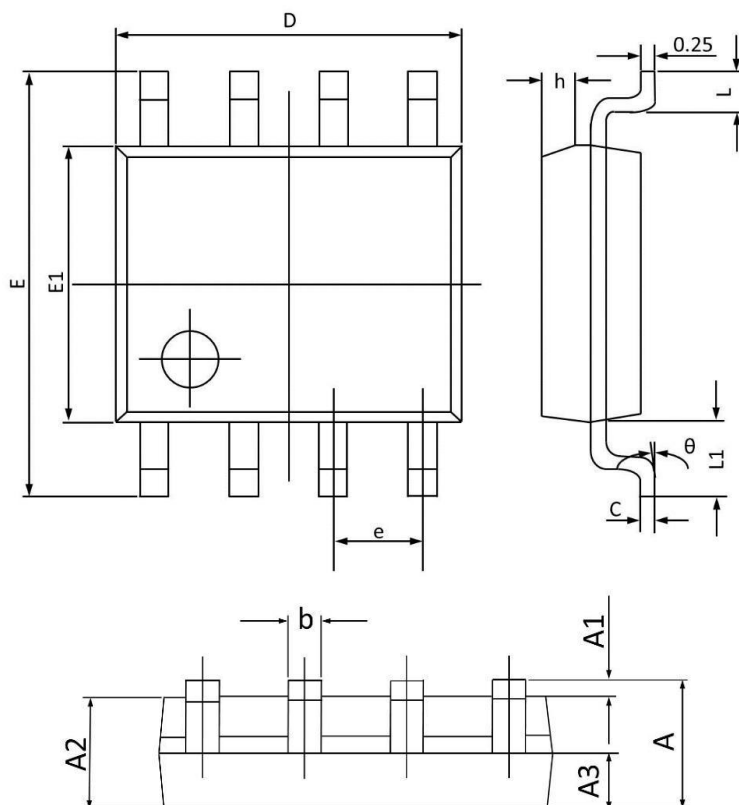


MBR565DC-P8

Package Information

SOP-8

Dimensions in mm



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.350	1.800	0.053	0.069
A1	0.050	0.250	0.002	0.010
A2	1.250	1.650	0.049	0.065
A3	0.500	0.700	0.020	0.028
b	0.300	0.510	0.012	0.020
c	0.150	0.260	0.006	0.010
D	4.700	5.100	0.185	0.201
E	5.800	6.200	0.228	0.244
E1	3.700	4.100	0.146	0.161
e	1.270(BSC)		0.050(BSC)	
h	0.250	0.500	0.010	0.020
L	0.400	1.000	0.016	0.039
L1	1.050(BSC)		0.041(BSC)	
θ	0°	8°	0°	8°