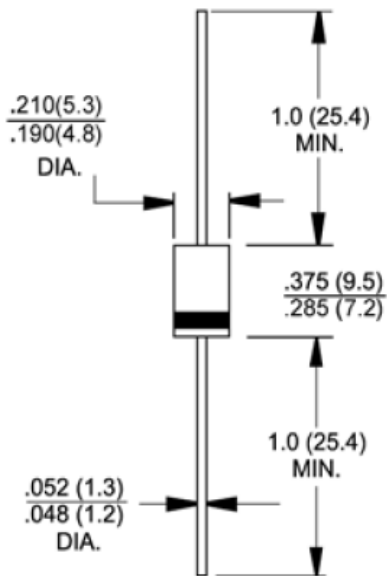


Photovoltaic Solar cell Protection Schottky Rectifier

Case Style: DO-201AD


Dimensions in inches and (millimeters)
Features

- Metal-Semiconductor junction with guard ring
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High current capability .low VF
- Low power loss,high efficiency
- For use in low voltage, high frequency inverters, free wheeling,and polarity protection applications
- T_{jmax} .200 in DC forward mode
- High temperature soldering guaranteed: 260 /10 seconds , 0.375(9.5mm) lead length , 5lbs.(2.3kg) tension

Mechanical Data
Case: DO-201AD Molded plastic body

Mounting Position: Any

Weight: 1.2 grams

Maximum Ratings & Electrical Characteristics

Ratings at 25 ambient temperature unless otherwise specified.

Parameter	Symbol	SB1035	SB1045	SB1050	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	35	45	50	V
Maximum RMS voltage	V_{RMS}	24.5	31.5	35	V
Maximum DC blocking voltage	V_{DC}	35	45	50	V
Average forward rectified current	$I_{F(AV)}$	10			A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300			A
Rating for fusig (t = 8.3ms)	I^2t	370			A ² sec
Forward voltage	VF	0.45			V
		0.55			
Maximum DC reverse current at rated DC blocking voltage per leg	IR	500			μ A
		25			mA
Typical thermal resistance per leg	$R_{\theta JA}$	14 ⁽¹⁾			/W
	$R_{\theta JC}$	3.4 ⁽²⁾			
Junction temperature	TJ	-50 ~ +150			
		200			
Storage temperature range	T_{STG}	-50 ~ +175			

- Notes: 1. Thermal Resistance Junction to Ambient
2. Thermal Resistance Junction to Case

Ratings and Characteristics Curves (TA = 25 unless otherwise noted)

Figure 1. Power Dissipation

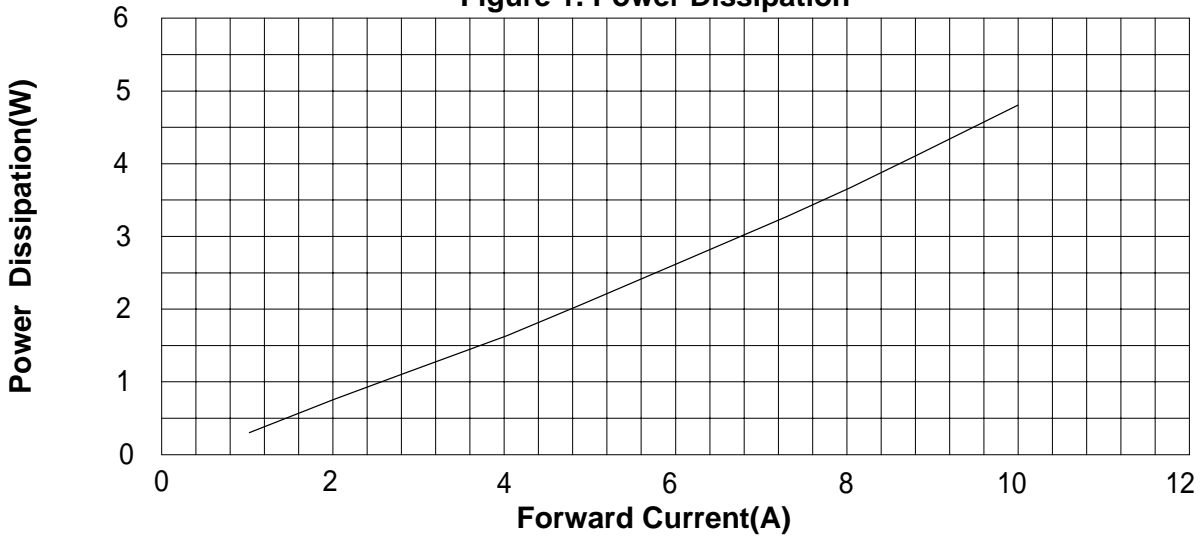


Figure 2. Forward Current Derating

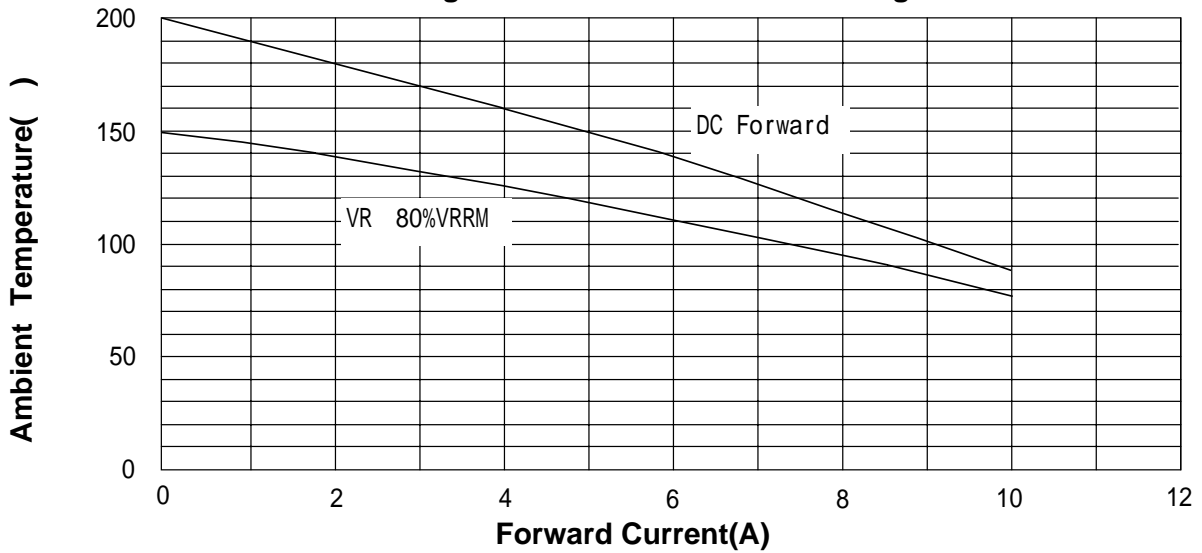


Figure 3. Forward Characteristics(Typical Value)

