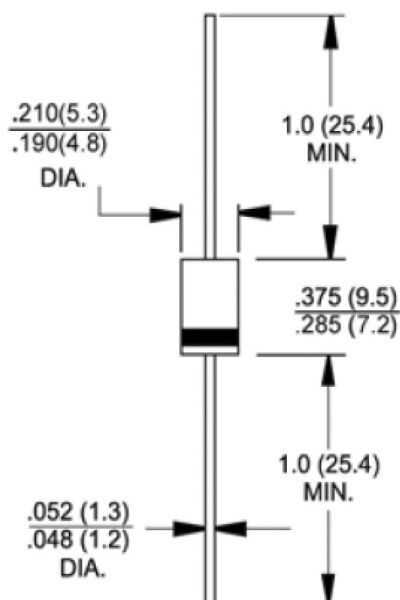


Photovoltaic Solar cell Protection Schottky Rectifier

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
- ◆ Tjmax.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

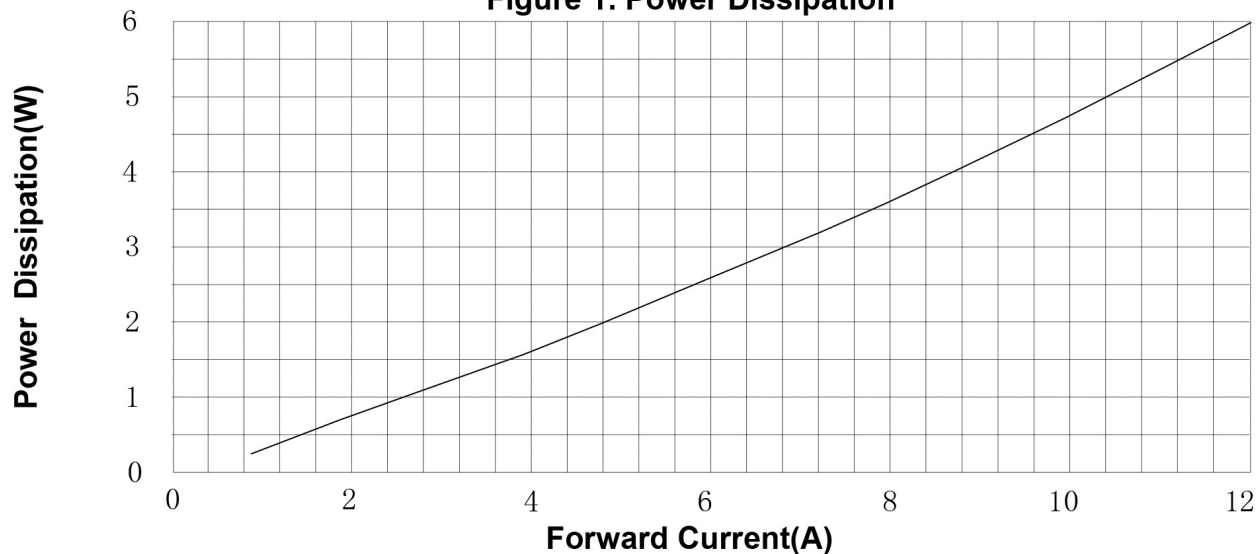
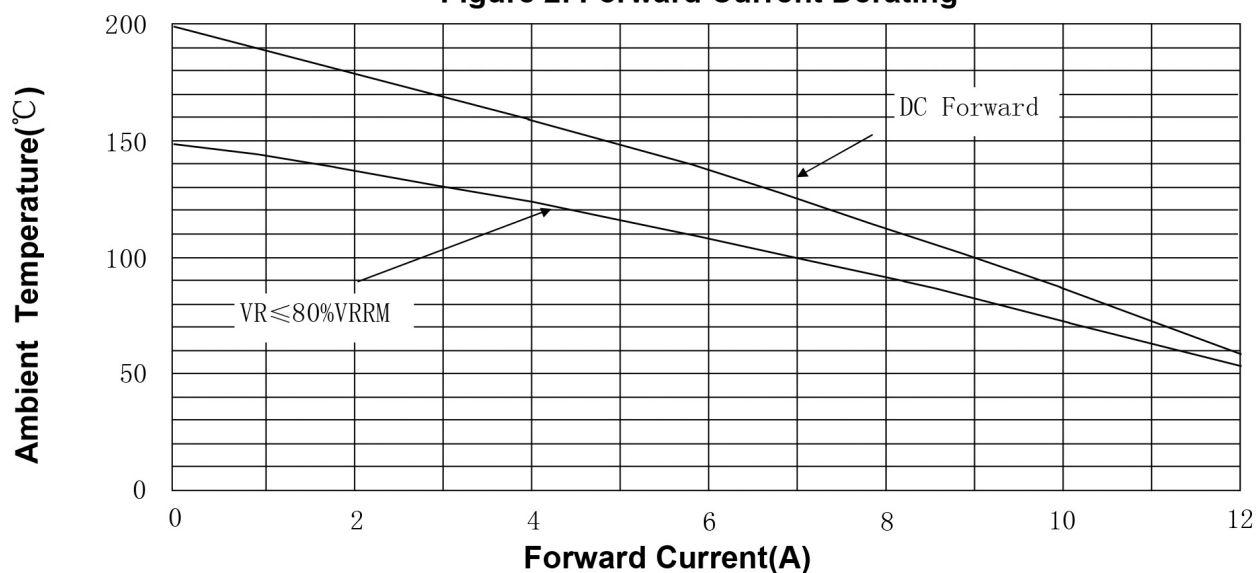
Maximum Ratings & Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

Parameter	Symbol	SB1235	SB1240	SB1250	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	35	40	50	V
Maximum RMS voltage	V _{RMS}	24.5	28	35	V
Maximum DC blocking voltage	V _{DC}	35	40	50	V
Average forward rectified current	I _{F(AV)}	12			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 ² t	370			A ² sec
Forward voltage IF=5A IF=12A	VF	0.45			V
		0.55			
Maximum DC reverse current at rated DC blocking voltage per leg Tj=25℃ Tj=125℃	IR	500			μA
		25			mA
Typical thermal resistance per leg	RθJA	14 ⁽¹⁾			℃/W
	RθJC	3.4 ⁽²⁾			
Junction temperature VR≤80%VRRM In DC forward mode	TJ	-50~+150			℃
		200			
Storage temperature range	TSTG	-50~+175			℃

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

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

Figure 1. Power Dissipation

Figure 2. Forward Current Derating

Figure 3. Forward Characteristics(Typical Value)
