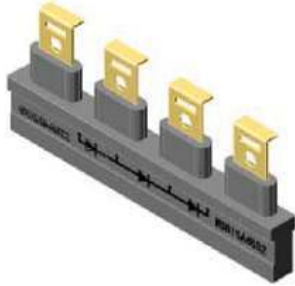


Bypass Diode Module for Solarcell (Schottky Barrier Diode Type)

Reverse Voltage 45V
Forward Current 15A



Outline Drawing



internal schematic diagram

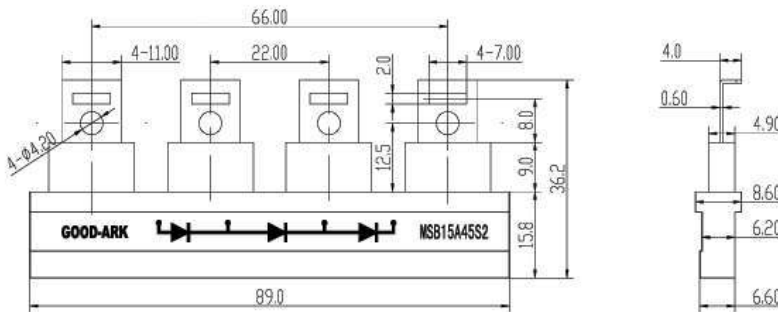
Features

- Low thermal resistance
- Low forward voltage drop, low power loss
- Compact outline design
- Excellent anti-humidity
- High current capability
- High forward surge capability
- RoHS compliance

Mechanical Data

Case: plastic body

Terminals: Sn plated leads



Dimensions in millimeters

Typical Applications

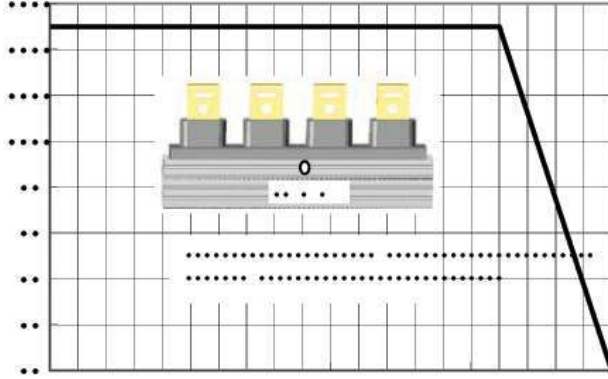
- For use in solar cell junction box as bypass diodes for protection, using DC forward current without reverse bias.

Maximum Ratings & Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified

Parameter	Symbol	MSB15A45S	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	45	V
Working peak reverse voltage	V_{RWM}	45	V
DC output current (Tc=160°C with special heatsink)	I_F	15	A
Surge forward current 1 cycle, 60HZ, peak value, non-repetitive	I_{FSM}	500	
Repetitive peak reverse current (VR=VRRM)	$I_{RRM (Max)}$	0.25	mA
Forward voltage drop IF=15A, Inst measurement	$V_{FM (Max)}$	0.5	V
Typical thermal resistance (junction to case, with heatsink)	$R_{\theta jc}$	0.8	°C/W
Operating junction temperature range (VR=80%VRRM)	T_J	• 55 to +150	• •
Junction temperature in DC forward current without reverse bias		200	• •
Storage temperature	T_{stg}	• 55 to +150	• •
Isolation voltage AC, 1minute	V_{ISO}	6000	V
Mass (typical value)		30	g

Ratings & Characteristics Curves

($T_a=25^\circ\text{C}$ unless otherwise noted)



Notes:

- Mounted on junction box
- Using DC forward current

