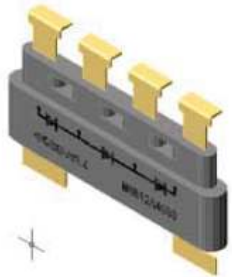


Bypass Diode Module for Solarcell (Schottky Barrier Diode Type)

Reverse Voltage 45V
Forward Current 12A



Outline Drawing



internal schematic diagram

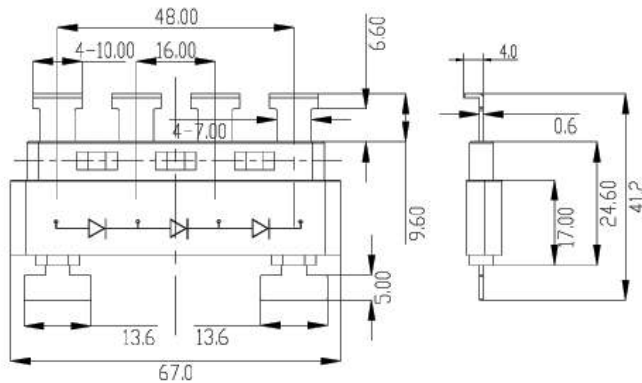
Features

- 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° 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° with special heatsink)	IF	12	A
surge forward current 1cycle,60HZ,peak value,non-repetitive	IFSM	400	
Repetitive peak reverse current (VR=VRRM)	$I_{RRM (Max)}$	0.25	mA
Forward voltage drop IF=12A,Inst measurement	$V_{FM (Max)}$	0.5	V
Typical thermal resistance (junction to case,with heatsink)	Rθjc	1.0	• °W
Operating junction temperature range(VR= 80%VRRM)	TJ	• 55 to+150	• •
Junction temperature in DC forward current without reverse bias,		200	• •
Storage temperature	Tstg	• 55 to+150	• •
Isolation voltage AC. 1minute	VISO	6000	V
Mass (typical value)		23	g

Ratings & Characteristics Curves

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

Notes:

- Mounted on junction box
- Using DC forward current

