

**1 ~ Bridge Rectifier Assembly
(High Voltage Diode Stack)**

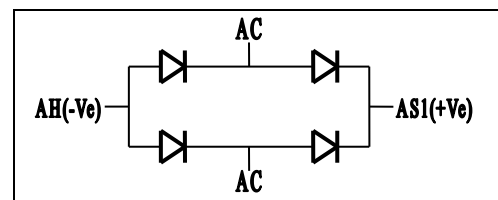
Features

- Avalanche Characteristics
- Low Leakage Current
- Excellent Stability
- Excellent Thermal Performance Design
- Low Mechanical Stress Design
- High Operating Temperature
- Improved Isolation and Cooling
- Easy Mounting
- Vibration tested at ETDC



Application

- Ideal for ESP Application
- HV Power Supply Application



Absolute Maximum Ratings

(Ta=25°C Unless Otherwise Specified)

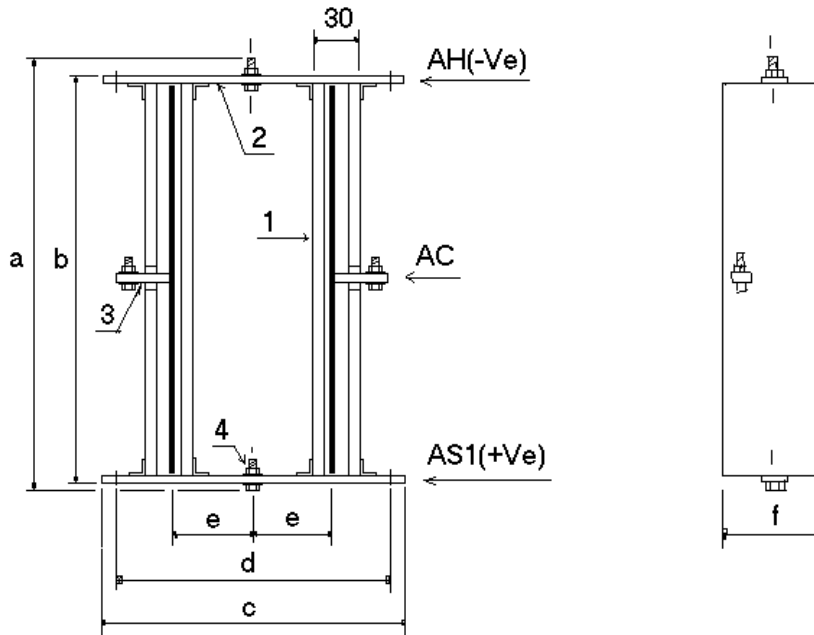
Parameter	Test Condition	Symbol	Min	Typ	Max	Unit
Peak Inverse Voltage per Diode/Arm		VRRM	-	-	290	kV
Allowed Supply AC Voltage		VvRMS	-	-	160	kV
Average DC Output Current	Tc = 100°C	IDAV / Io	-	-	1.4	A
Peak Repetitive Forward Current	Tc = 100°C F = 50Hz	IFRM	5	-	-	A
Peak Surge Forward Current	Tp = 10ms	IFSM	-	-	50	A
Operating Temperature Range		Top	-40	-	125	°C
Maximum Operating Frequency		F(max)	-	-	5	kHz
Storage Temperature Range		Tstg	-40	-	125	°C

Electrical Characteristics

(Ta=25°C Unless Otherwise Specified)

Parameter	Test Condition	Symbol	Min	Typ	Max	Unit
Forward Voltage per Diode/Arm	IF = 1.5A	VF1	-	-	260	V
Reverse Current	VR = VRRM Ta = 25°C	IR1	-	1	5	uA
	VR = VRRM Ta = 100°C	IR2	-	50	100	uA
Reverse Breakdown Voltage per Diode/Arm	IR = 100 µA	V(BR)R	315	-	450	kV

Package outline & Dimensions



Part #	a mm	b mm	c mm	d mm	e mm	f mm	Weight Kg
1BR95P	640	610	350	320	90	100	5.3

4	Brass Nut-Bolt Assembly, M8	4	Tin plated
3	Cu Bus Bar, 25x8mm	2	Tin plated
2	Cu Bus Bar, 30x6mm	2	Tin plated
1	PCB-Sheet Assembly	2	
Item no.	Description	Quantity	Remark

Technical note

The operating reliability of high voltage rectifier assembly is mainly influenced by the safe margin between the specified limit values and the operating data.

Symbols and Definitions

- VRRM - Maximum repetitive peak reverse voltage
- VvRMS - Maximum allowed supply AC-voltage (RMS-value)
- IDAV - Average DC-output current
- IFSM - Peak one cycle surge forward current
- VTO - Threshold voltage (for power loss calculations only)