

Part Number: SCP-6115, Rev. -

3 Phase Full Wave Bridge Rectifier Module with Fuse

Features

- Excellent Thermal Performance
- Compact package, Low Weight
- Isolated base plate: 1500V
- **Safety Feature: Built-in Fuse in each AC leg to fail open under fault**

Maximum Ratings

(T_c=25°C UNLESS OTHERWISE SPECIFIED)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Peak Inverse Voltage and DC Blocking Voltage Per Diode	BV _{CES}	1100	-	-	V
Module Average Rectified Forward Current T _C = 55 °C	I _O	-	-	36	A
T _C = 100 °C		-	-	26	A
T _C = 125 °C		-	-	20	A
Peak Surge Current Per Diode Non-Repetitive t _p = 8.3ms	I _{FSM}	-	-	150	A
Peak Surge Current Per Diode Repetitive	I _{FRM}	-	-	25	A
Fuse Rating on each leg Non-Repetitive t _p = 8.3ms	I _{FUSE}	-	400	-	A
Operating & Storage Temperature Range	T _{OP} & T _{STG}	- 55	-	175	°C

Electrical Characteristics

(T_c=25°C UNLESS OTHERWISE SPECIFIED)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage I _F = 9A, t _p = 300 μs Pulse	V _{F1} V _{F2}	-	1.40	1.70	V
T _C = 25 °C		-	-	1.55	V
T _C = 100 °C					
Reverse Leakage Current V _R = 1000V, t _p = 300 μs Pulse	I _{R1} I _{R2}	-	-	2.0	μA
T _C = 25 °C		-	-	50	μA
T _C = 100 °C					
Breakdown Voltage I _R = 10 μA, t _p = 300 μs Pulse	B _{VR}	1100	-	-	V
Reverse Recovery Time	t _{RR}	-	0.6	1	μs
I _F = 10A, di/dt = 10A / μs, V _R = 100V					
Capacitance per Diode V _R = 10V, f = 1 MHz	C _T	-	80	200	pF

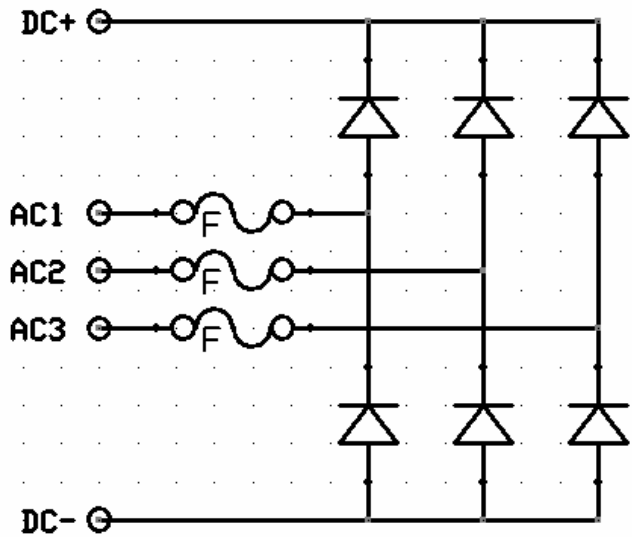
Package Characteristics

Thermal Impedance (Junction to Base) per Diode	Z _{θJB}	-	-	0.80	°C/W
I _H = 15A, t _H = 5ms					
Module Thermal Resistance (Junction to Base)	R _{θJB}	-	-	0.84	°C/W
Isolation to Base Plate	V _{iso}	-	-	1500	V
Module Weight	M	-	-	10	gms

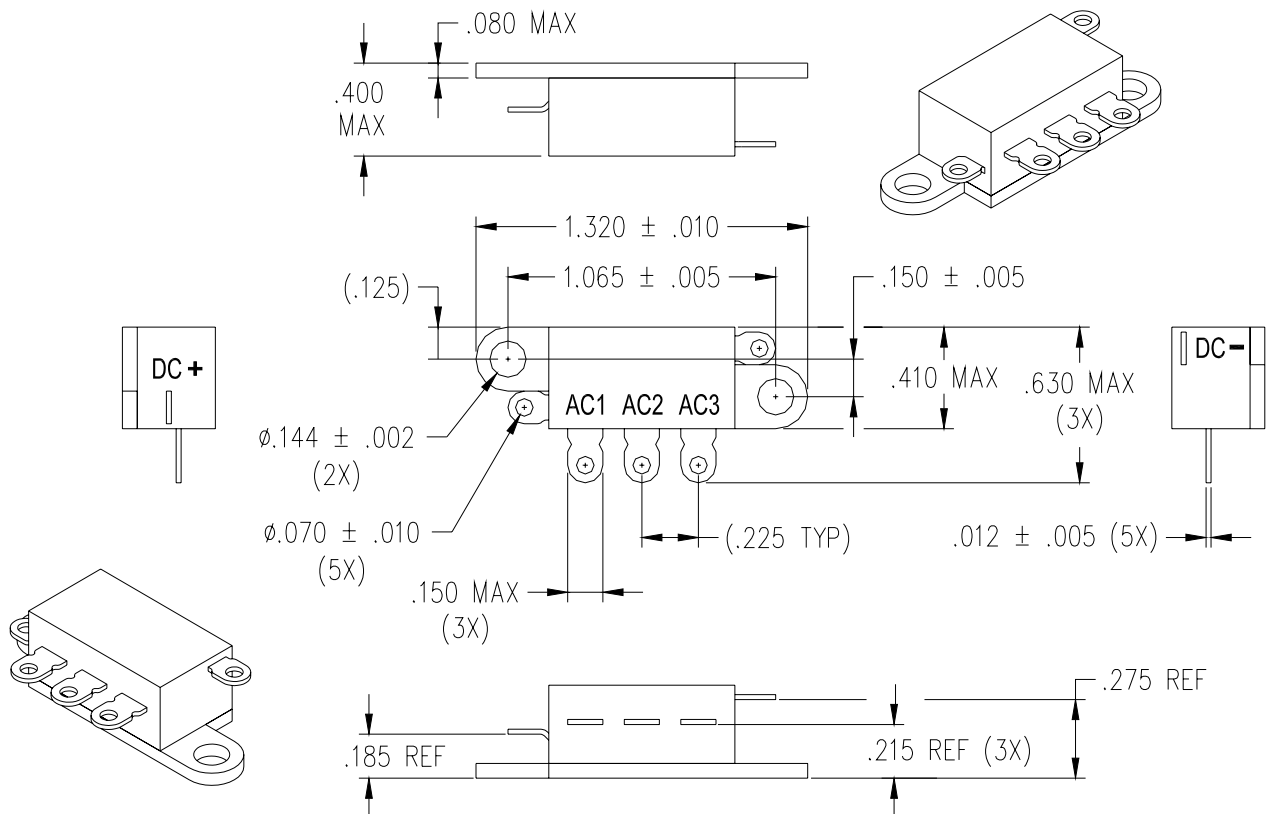
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Schematic Diagram:



Mechanical Outline:



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