

Part Number: SCP-5911, Rev. -

3 Phase Full Wave Bridge Rectifier Module

Features

- Excellent Thermal Performance
- Compact package, Low Weight
- Isolated base plate: 1500V
- High Surge Capability

Maximum Ratings

(T_j=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 T _C = 100 °C T _C = 125 °C	I _O	-	-	30	A
		-	-	24	A
		-	-	18	A
Peak Surge Current Per Diode t _p = 8.3ms	I _{FSM}	-	-	150	A
Operating & Storage Temperature Range	T _{OP} & T _{STG}	- 55	-	175	°C

Electrical Characteristics

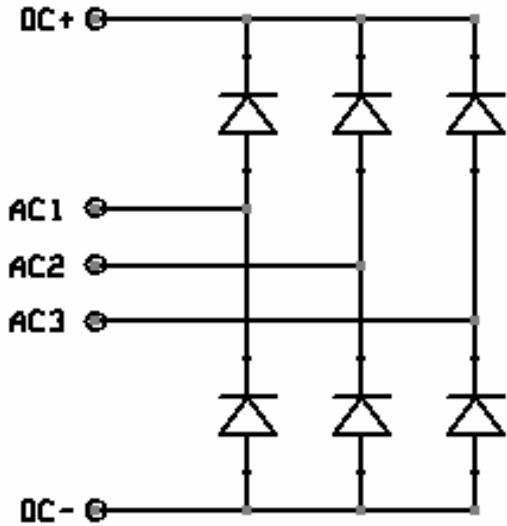
(T_j=25°C UNLESS OTHERWISE SPECIFIED)

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

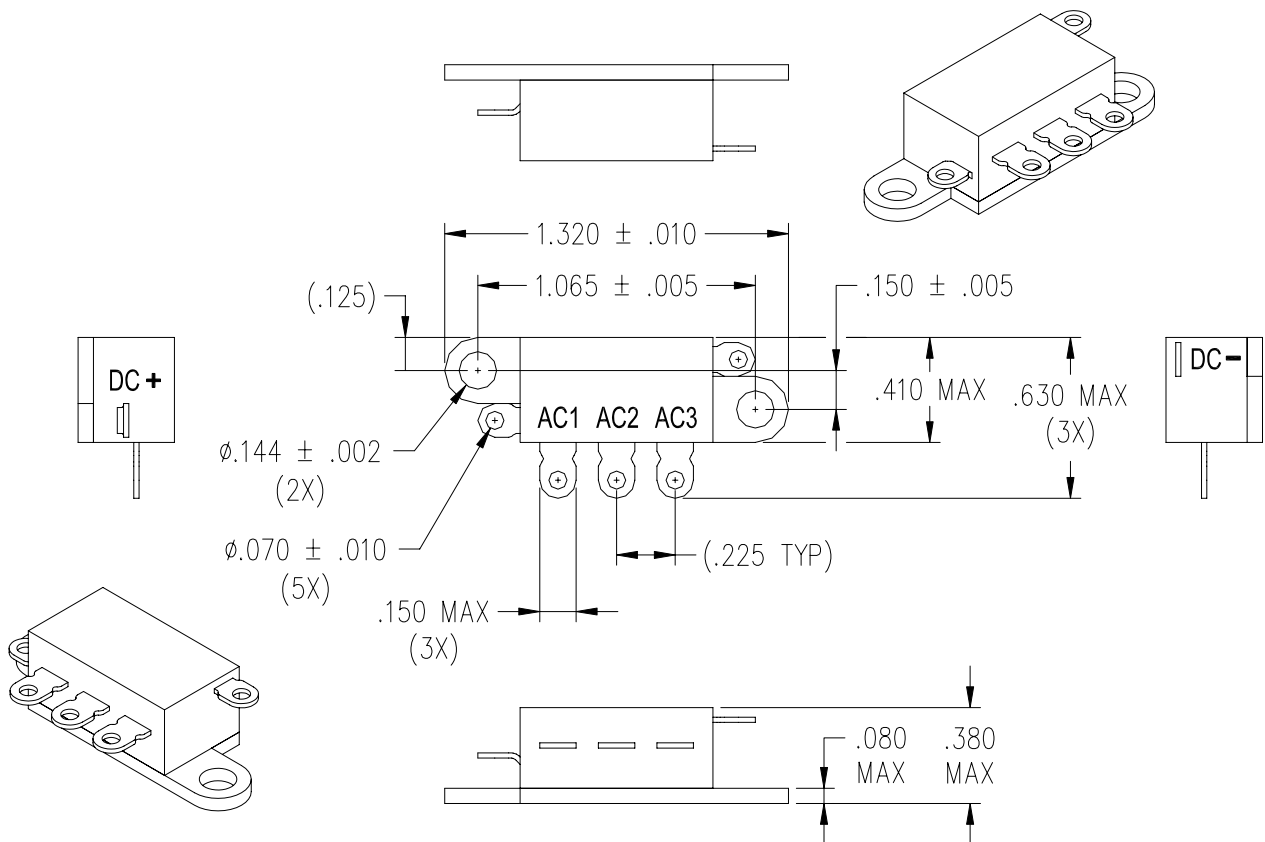
Package Characteristics

Thermal Impedance (Junction to Base) per Diode I _H = 15A, t _H = 5ms	Z _{θJB}	-	-	0.80	°C/W
Module Thermal Resistance (Junction to Base)	R _{θJB}	-	-	0.67	°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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