

**X-Band Junction Circulator**

**DESCRIPTION**

The B3JC1647 is a 3-port, H-plane, X-band junction circulator designed for the low-cost marine radar market.

**SPECIFICATION**

**Electrical**

Frequency range.....	9.3 to 9.5 GHz
Return loss (see note 1).....	20 dB min
Insertion loss.....	0.4 dB max
Isolation.....	20 dB min
Power handling (see note 2).....	4 kW peak
	4 W mean

**Environmental**

Operating temperature range.....	-30 to +75°C
Storage temperature range.....	-40 to +90°C
Shock.....	100G

**Mechanical**

Waveguide	WG16
Material	aluminium alloy
R.F. flanges	to mate with UG135/U
	MIL-F3922/54C
	PBR100
Weight	150 g approx

**NOTES**

1. Unused ports terminated a matched termination
2. Output port terminated with v.s.w.r. 2.0:1 maximum.
3. The protective tape covering the waveguide must be removed before assembly.
4. Strong magnetic fields may affect operation. Magnetic components must be kept 50 mm from the unit during operation

**OUTLINE**

Ref	Millimeters
A	50.0 ± 0.2
B	50.0 ± 0.5
C	50.0 ± 0.5
D	4.3 + 0.3 - 0.1
E	28.6 ± 0.2
F	32.5 ± 0.2
G	31.0 ± 0.2

