

### DESCRIPTION

The B3JC1007 is a small and lightweight S-band, E-plane flange circulator, designed for use in marine radars. It provides isolation of the receiver protector from the transmitter.

### SPECIFICATION

#### Electrical

Frequency range..... 3030 to 3070 MHz  
 Return loss (see note 1)..... 20 dB min  
 Insertion loss..... 0.3 dB max  
 Isolation ..... 20 dB min  
 Power handling (see note 2) ..... 30 kW peak,  
 pulse length 1 ms, prf 1000 pps

#### Mechanical

Waveguide..... WG10  
 72.14 x 34.04 mm  
 Material..... Aluminium HE30

#### Environmental

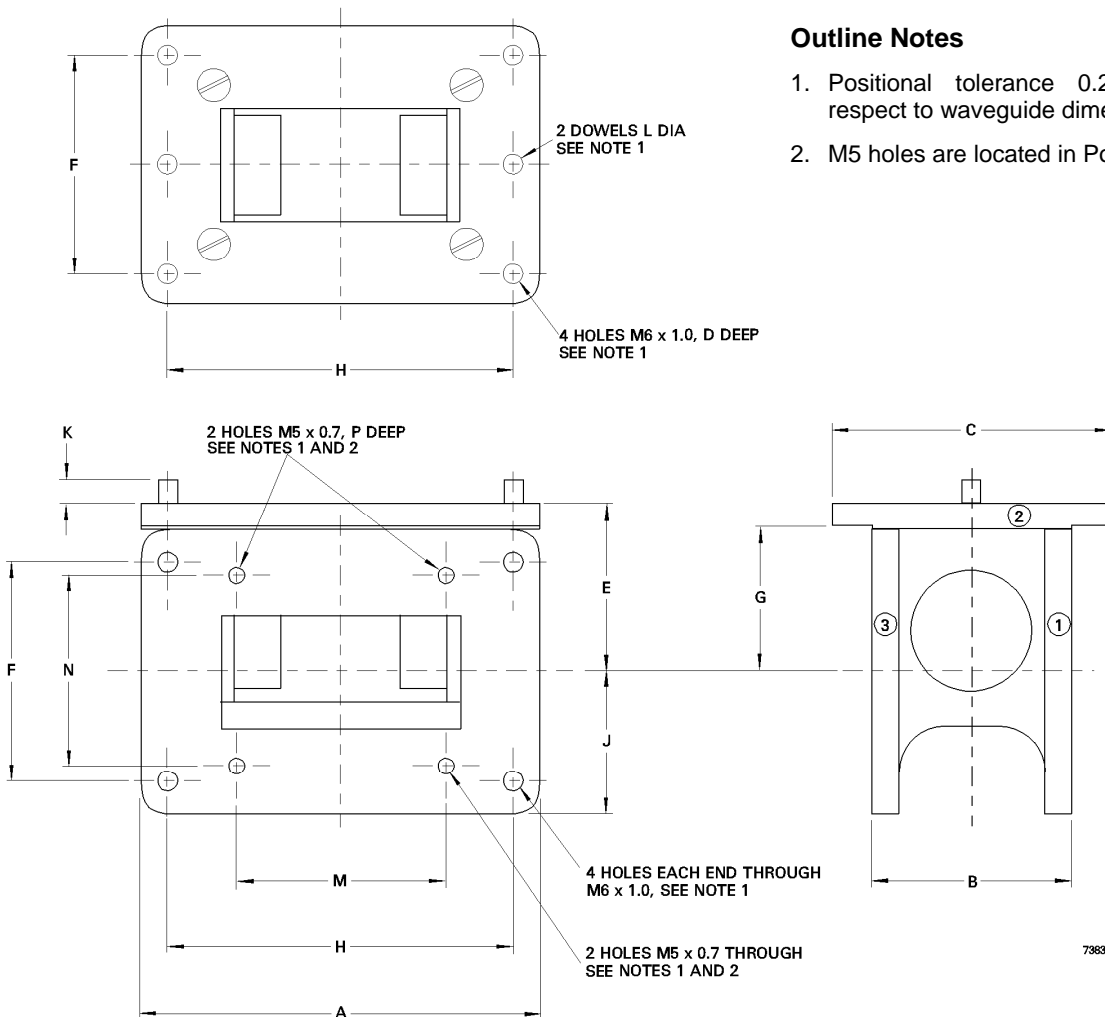
Operating temperature range..... -25 to +80 °C

### NOTES

1. Return loss specified over ambient temperature range 10 °C to 30 °C. Other ports terminated with VSWR 1.1:1 maximum.
2. Output port terminated with VSWR 2:1 maximum, isolated port terminated with any VSWR, including full short circuit, in any phase.

### OUTLINE

(All dimensions without limits are nominal)



#### Outline Notes

1. Positional tolerance 0.2 mm diameter with respect to waveguide dimensions.
2. M5 holes are located in Port 3 flange only.

Ref	Millimetres
A	120.0
B	60.0
C	84.0
D	7.7 max 6.2 min
E	51.0
F	65.08
G	44.0 min
H	103.18
J	42.0
K	6.75 + 0.25
L	6.0
M	63.5
N	57.2
P	10.0 min

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