# QHT-3 Series - 90° Power Dividers/Combiners

# **TECHNICAL FEATURE**

## **FEATURES**

- 1 to 400 MHz
- 30% Bandwidth Standard
- Low Insertion Loss
- High Isolation
- TO-5 Package

	Phasing Diagram - A					
	1	2	3	4		
1		ref.	– 90°	Isol.		
2	ref.		Isol.	– 90°		
3	– 90°	Isol.		ref.		
4	Isol.	– 90°	ref.			

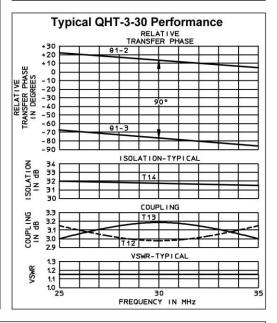
PRINCIPAL SPECIFICATIONS					
Model Number	Center Frequency, f <sub>o</sub>	Usable Bandwidth, MHz			
QHT-3-60 QHT-3-***B	60 MHz 1 to 400 MHz	$\begin{array}{c} 51 - 69 \\ f_o \pm 15\% \end{array}$			

For complete Model Number replace \*\*\* with desired Center Frequency,  $f_0$  in MHz.

# Package Outline (BEAD DIFFERENT COLOR) 1270 MAX 375: .060 953: 152 PORT 2 200 254 PORT 4 GROUND PIN PORT 4 GROUND PIN PORT 3 NOTES: 1. Tolerance on 3 place decimals ±.010(.25) except as noted. 2. Dimensions in inches over millimeters.

# **GENERAL SPECIFICATIONS**

Coupling: - 3 dB nom. Isolation: 20 dB min. Insertion Loss: 0.5 dB max. Phase Tolerance:  $90^{\circ} \pm 3^{\circ}$  max. Amplitude Balance: 0.5 dB max. Impedance: 50  $\Omega$  nom. VSWR: 1.3:1 max. CW Input: 1 Watt max. Weight, nominal: 0.1 oz. (2.8 g) Operating Temperature: - 55° to +85°C



### **General Notes**

1. The QHT-3 series of two-section hybrids covers 1 to 400 MHz using a special lumped element design to minimize size while maintaining high performance. The TO-5 package used is suitable for aerospace applications where inherent package reliability and hermeticity are essential.

2. These units comply with MIL-P-23971 and can be supplied screened for compliance with additional specifications for military and space applications requiring the highest reliability.

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