

### TECHNICAL FEATURE

### FEATURES

- 18 - 32 GHz
- 2 - Way
- Space Qualified

### PRINCIPAL SPECIFICATIONS

Model Number	Frequency Range GHz	Isolation dB Min.	Insertion Loss, dB Max.	Phase Balance Max.	Amplitude Balance dB Max.	VSWR <sup>1</sup> Max.		CW Input, W, <sup>2</sup> Load VSWR out		
						In	Out	1.2:1	2.0:1	∞
PDK-25R-25GSQ	18 - 32	15	1.5	10°	0.5	1.6:1	1.6:1	5	2	0.5

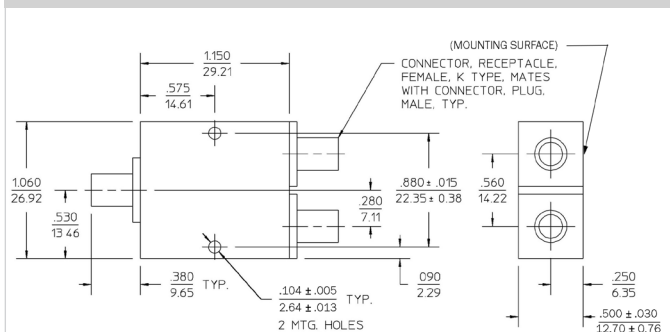
### GENERAL NOTES

- The PDK-25R-25GSQ In-Phase Power Divider/Combiner covers 18-32 GHz. It uses a wideband stripline design which provides high isolation and low VSWR. This unit has been designed, manufactured, and tested per Merrimac document CENG-0001, "Standard Design Requirements for Space Qualified Devices."

### PERFORMANCE NOTES

- Impedance ..... 50 Ω nom.  
 Operating Temperature..... -55° to +85° C
- Measure with a source and load VSWR = 1.05:1.
  - 500 mW total input as a combiner (250 mW per input); 500 mW input power as a divider with open/short circuit outputs; 2 W input power as a divider into output load VSWR <2:1.

### PACKAGE OUTLINE



- NOTES:
- Dimensions are in inches over millimeters; tolerance on 3 place decimals ± .020" (± 0.51 mm), except as noted.
  - Weight is 45 grams maximum.
  - Connectors are SMK Female.
  - Case is 6061-T6, 6061-T651, or 6061-T6511 aluminum alloy per AMS-QQ-A-200, AMS-QQ-A-225, or AMS-QQ-A-250 (ASTM B209, ASTM B211, and ASTM B221 are acceptable equivalents).
  - Finish:  
 Body: Aeroglaze Z306 (black paint), excluding connector threads, areas around mounting and vent holes and mounting surface.  
 Mounting surface and masked areas: Chemical Film per MIL-DTL-5541, Class 3, Type I.

### POWER

