



3-WAY IN-PHASE DIVIDER COMBINER

MODEL DT53

Guaranteed Specifications

Parameter	Range	Limits
Frequency	500 kHz to 1 GHz	Min
Insertion Loss	500 kHz to 500 MHz	.5 dB Max
	500 MHz to 1 GHz	1 dB Max
Isolation	500 kHz to 1 GHz	20 dB Min
	2 MHz to 100 MHz	30 dB Min
Amplitude Balance	500 kHz to 500 MHz	.25 dB Max
	500 MHz to 1 GHz	.5 dB Max
Phase Balance	500 kHz to 100 MHz	1° Max
	100 MHz to 1 GHz	3° Max
VSWR Input port	500 kHz to 250 MHz	1.2:1 Max
	250 MHz to 1 GHz	1.4:1 Max
Output ports	2 MHz to 400 MHz	1.3:1 Max
	500 kHz to 1 GHz	1.5:1 Max
Impedance	50 Ohms	Nominal

Note: All specifications apply in a 50 Ohm system. 75 Ohm models are available.

Maximum Ratings

Input Power	1 Watt
Internal Dissipation	100 mW
Temperature Range	-54°C to +85°C

Reliability

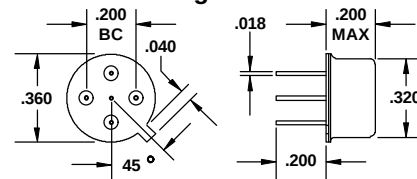
All units are designed and constructed to meet or exceed specifications after exposure to any or all of the following MIL-STD-202 tests which are applicable.

Test	Method	Condition
Temperature Cycle	107G	A
Thermal Cycle	107G	AA
Seal	112E	D
Vibration	204D	A
Solderability	208F	
Terminal Strength	211A	A
Terminal Fatigue	211A	C
Mechanical Shock	213B	C

Features

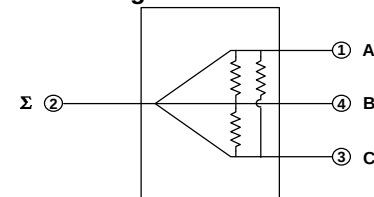
- ◆ >3 Decade Bandwidth
- ◆ Small Footprint (0.1 in²)
- ◆ <0.3 dB Midband Loss
- ◆ >30 dB Midband Isolation

Outline Drawing



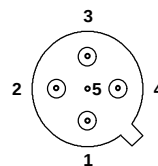
Weight (Approx.) 1.5 grams

Block Diagram



Case is Signal Ground

Connections



PORT A	1
SUM PORT	2
PORT C	3
PORT B	4
GROUND	5

All characteristics of Tele-Tech products may be modified to meet customer requirements.

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