

Surface Mount Bias-Tees

NEW!

TCBT-6G

Wideband 50 to 6000 MHz

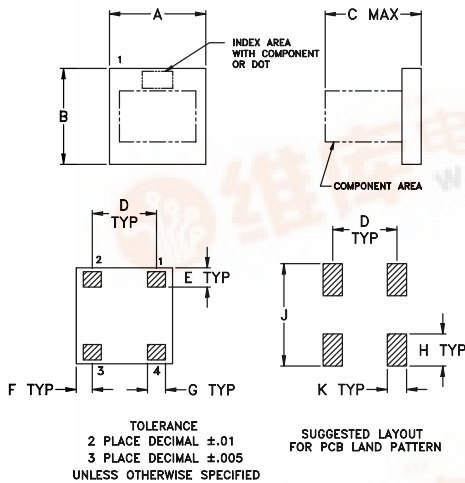
Maximum Ratings

Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	30dBm max.
Voltage at DC port	25V max.
Input Current	200mA

Pin Connections

RF	4
RF&DC	3
DC	1
ISOLATED	2

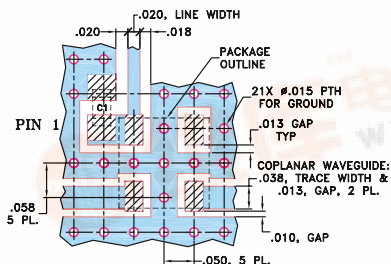
Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F	G
.150	.150	.150	.100	.030	.025	0.28
3.81	3.81	3.81	2.54	0.76	0.64	0.71
H	J	K	wt.			
.050	.160	.030	grams			
1.27	4.06	0.76	.10			

Demo Board MCL P/N: TB-268
Suggested PCB Layout (PL-146)



CAPACITOR C1: .010 mF, 0603 SIZE

NOTE: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS 0.020 ± 0.0015 ".
COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

3. DENOTES PCB COPPER LAYOUT

4. DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

Features

- wideband, 50-6000 MHz
- low insertion loss, 0.7 dB typ.
- miniature surface mount 0.15×0.15 "
- patent pending

Applications

- biasing amplifiers
- biasing of laser diodes
- biasing of active antennas



BLUE CELL™

CASE STYLE: GU1041

PRICE: \$11.95 ea. QTY (10-49)

Electrical Specifications*

MODEL NO.	FREQ. RANGE (MHz)	INSERTION LOSS** (dB)			ISOLATION** (dB)			VSWR** (:1)		
		L	M	U	L	M	U	L	M	U
	$f_L - f_U$	Typ. Max.	Typ. Max.	Typ. Max.	Typ. Min.	Typ. Min.	Typ. Min.	Typ. Max.	Typ. Max.	Typ. Max.
TCBT-6G	50-6000	0.2	0.8	1.1	52	38	28	1.05	1.5	1.2

L=50-500 MHz

M=500-3000 MHz

U=3000-6000 MHz

* Guaranteed to 25 dBm RF and 100mA current.

** Tested with C external= 0.01 μ F

Schematic

