

MJTC Series - Thin-Film Planar Multijunction Thermal Converters

Custom solutions are available.

HOW TO ORDER

MJTC- 101 G X M

Packaging

TCR (ppm/°C)

X = ±25ppm

Resistance Tolerance

K = ±10%

Resistance

100Ω = 101

500Ω = 501

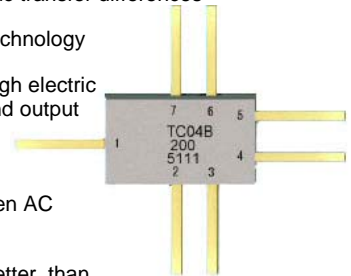
1,000Ω = 102

Series

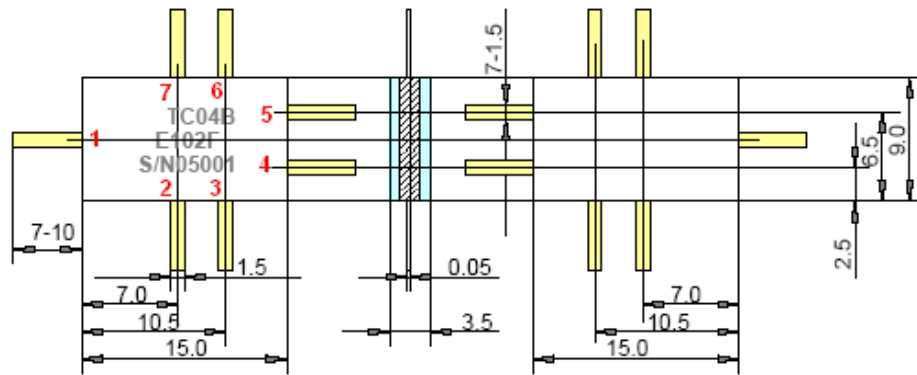
Thin Film Planar Multijunction Thermal Converter

FEATURES

- Improved high-frequency ac-dc transfer differences
- Special thin-film thermopile technology
- Good thermal coupling and high electric isolation between the input and output circuits.
- Sensitivity of 10-6 to 10-7 for comparing rms power between AC and DC input voltages.
- Frequency characteristic of better than 0.001% in the frequency range of 10 Hz to 100 kHz, and better than 0.01% at 100kHz to 1 MHz.



DIMENSIONS & CONFIGURATION

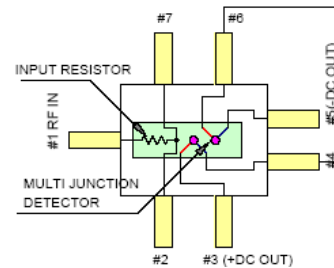


Pin Legend	
1	Input Hi
2	Input Lo, Internal Connect to 7
3	DC Output + (1)
4	DC Output - (1)
5	DC Output - (2)
6	DC Output + (2)
7	Input Lo, Internal Connect to 2

SPECIFICATIONS & PERFORMANCE

Input	Rated Power	0.1W
	Max Applied Power	0.5W
	Resistance (Ω)	50, 100, 200, 500, 1K, or 2K
	TCR (ppm/°C)	±25
	Frequency Range	DC-1MHz
Output	Rating output voltage	More than 60mV
	Output Resistance	340 Ohms ±30%
	TC of Output Resistance	±300ppm/K
Input/Output	Sensitivity	More than 0.6 V/W
	TC of Sensitivity	-0.001mV/mW/K (typical)
	Response Time	2.5 ± 0.6 sec (63% response)
	AC-DC Difference, 10k-100kHz	< 10ppm (typical)
AC-DC Difference, 100K-1MHz	< 100ppm (typical)	
Env.	Operating Temperature	25°C ± 5°C
	Storage Temperature	-20°C ~ +60°C

EQUIVALENT CIRCUIT & PIN ASSIGNMENT



Top View

RECOMMENDED FOOT PATTERN

Note: Direct connection to center conductor of RF connector from pin 1 is recommended.

