

RMS-DC CONVERTER  
LP-34B, LP34TW



Features and Applications

True RMS-DC converter.

RMS of AC input, those are RF, AC distortion or noise signals at the input terminal change at the output terminal to stable DC voltage. Input voltage warms thin film resistor, small temperature rises of the resistor convert to DC voltage through thin film thermocouples.

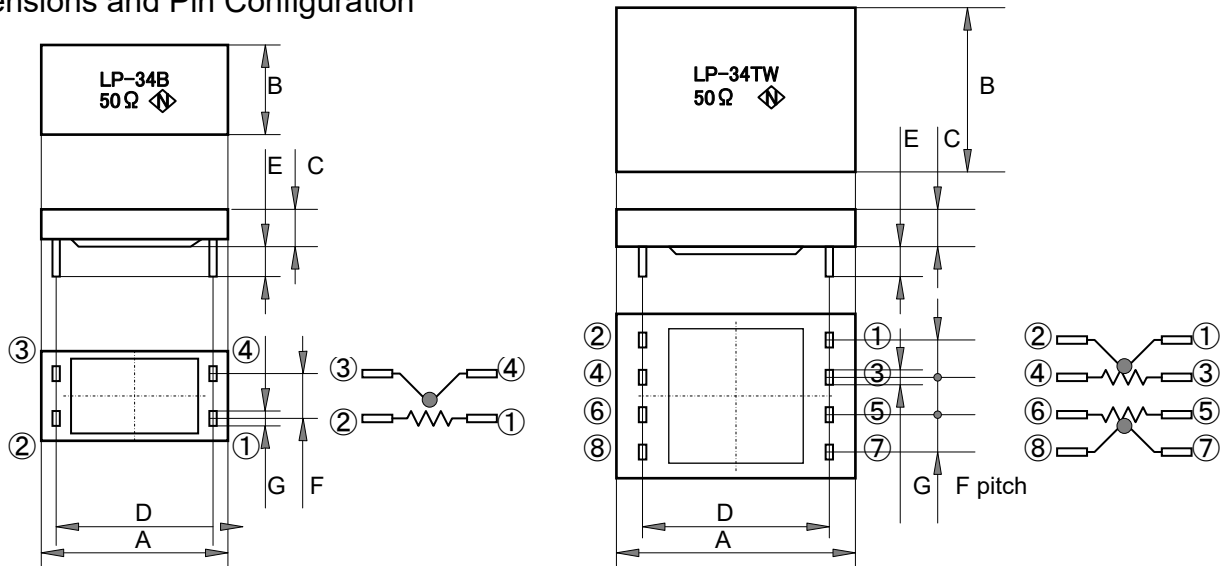
Realizes fast response time and stable conversion sensitivity.

LP34TW houses dual resistor-thermocouple pair and the dual balanced type has more stable characteristics in ambient temperature changes.

Tiny smd detector for DC to a few GHz applications also available. Please contact the factory.

For RF power measurements, RMS-DC conversion, and thermal converter applications.

Dimensions and Pin Configuration



Type	A	B	C	D	E	F	G
LP34B	25.0	12.5	4.5	20.5	5.0	5.08	0.4
LP34TW	32.0	22.0	5.5	25.5	3.5	5.08	0.4

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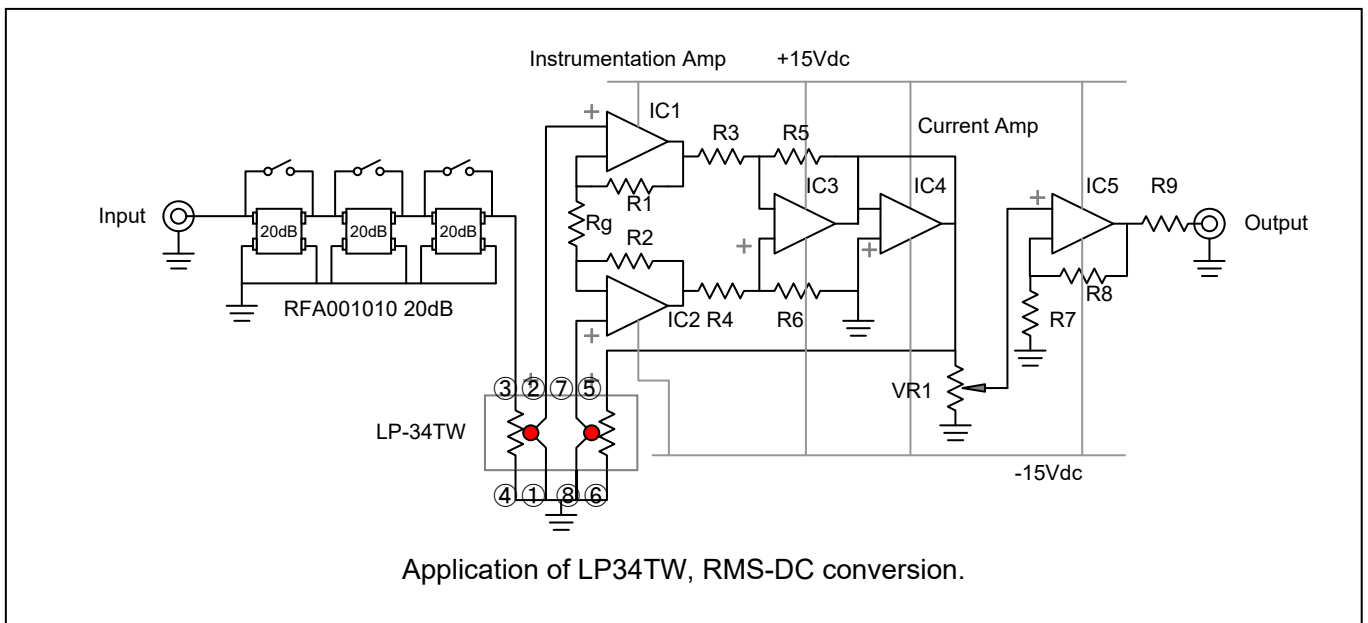
LP-34B, LP34TW

Ordering Information

Type LP34TW	TCR ----	Input Resistance 50R0	Tolerance K	Code 000
LP34B	----	50R0	K (+/-10%)	000
LP34TW		75R0		(not RoHS)

Specifications and Performances

Type	LP-34B, Single	LP-34TW, Dual	Conditions
<b>INPUT</b>			
Rated Power	10mW	10mW	
Max Applied Power	20mW	20mW	
Resistance	50Ω or 75Ω	50Ω or 75Ω	
TCR	+/-100ppm/°C	+/-100ppm/°C	
Tolerance	+5% , - 30%	+5% , - 30%	
Ratio	-	5%	
Frequency Range	DC - 120MHz	DC - 120MHz	
<b>OUTPUT</b>			
Sensitivity	> 2.0mV/mW	> 1.4mV/mW	
TC of Sensitivity	(-0.2% +/- 0.1%)/°C	(-0.2% +/- 0.1%)/°C	
Linearity Error	< 1.5% / 1mV-13mV	-	
Diff. of Linearity	-	< +/- 2.0%	
Diff. of Sensitivities	-	< +/- 8.0%	
Internal Resistance	< 3KΩ	< 12KΩ	
Response Time	< 0.3 seconds	< 0.3 seconds	63% response
Operating Temp.	-10C – 60°C	-10C – 60°C	
Storage Temp.	-20C – 80°C	-20C – 80°C	
Weight			



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