

Detector Specifications

Det. Model	Frequency Range	Power Range	Max. Power (Peak or Avg)	Maximum VSWR	RF Conn
HIGH SPEED — 15 ns					
16936	750 MHz to 18.5 GHz	-20 dBm to +20 dBm (Pulse) -40 dBm to +20 dBm (CW)	+23 dBm (200 mW) (Damage Limit)	1.12: 750 MHz to 2 GHz 1.22: 2 to 12.4 GHz 1.37: 12.4 to 18 GHz	Type N (m)
16937	750 MHz to 18.5 GHz	-20 dBm to +20 dBm (Pulse) -40 dBm to +20 dBm (CW)	+23 dBm (200 mW) (Damage Limit)	1.12: 750 MHz to 2 GHz 1.22: 2 to 12.4 GHz 1.37: 12.4 to 18 GHz	APC-7 (mm)
17266	750 MHz to 26.5 GHz	-20 dBm to +20 dBm (Pulse) -40 dBm to +20 dBm (CW)	+23 dBm (200 mW) (Damage Limit)	1.12: 750 MHz to 2 GHz 1.22: 2 to 12.4 GHz 1.37: 12.4 to 18 GHz 1.50: 18 to 26.5 GHz	Type K (m)
17071	750 MHz to 40.0 GHz	-20 dBm to +20 dBm (Pulse) -40 dBm to +20 dBm (CW)	+23 dBm (200 mW) (Damage Limit)	1.12: 750 MHz to 2 GHz 1.22: 2 to 12.4 GHz 1.37: 12.4 to 18 GHz 1.50: 18 to 26.5 GHz 1.92: 26.5 to 40 GHz	Type K (m)
LOW SPEED — 750 ns					
16934	30 MHz to 18.5 GHz	-20 dBm to +20 dBm (Pulse) -40 dBm to +20 dBm (CW)	+23 dBm (200 mW) (Damage Limit)	1.12: 30 MHz to 2 GHz 1.22: 2 to 12.4 GHz 1.37: 12.4 to 18 GHz	Type N (m)
16935	30 MHz to 18.5 GHz	-20 dBm to +20 dBm (Pulse) -40 dBm to +20 dBm (CW)	+23 dBm (200 mW) (Damage Limit)	1.12: 30 MHz to 2 GHz 1.22: 2 to 12.4 GHz 1.37: 12.4 to 18 GHz	APC-7 (mm)
17267	30 MHz to 26.5 GHz	-20 dBm to +20 dBm (Pulse) -40 dBm to +20 dBm (CW)	+23 dBm (200 mW) (Damage Limit)	1.12: 30 MHz to 2 GHz 1.22: 2 to 12.4 GHz 1.37: 12.4 to 18 GHz 1.50: 18 to 26.5 GHz	Type K (m)

- The dimensions and weight are identical for all detectors:
 Length = 133 mm (5.25 in)
 Diameter = 37 mm (1.44 in)
 Weight = 0.3 kg (0.7 lbs)

Frequency Range:

High Speed: 750 MHz to 18.5 GHz
 750 MHz to 26.5 GHz
 750 MHz to 40 GHz
 (High speed detectors can be used down to 500 MHz.)

Low Speed: 30 MHz to 18.5 GHz
 30 MHz to 26.5 GHz

Rise Time:

High Speed: <15 ns (Typical = 12 ns)

Step Response: Ringing <5% p-p settling to <2% p-p in 200 ns

Low Speed: <750 ns (Typical = 250 ns)

Power Range:

Measurement: -20 to +20 dBm (Pulse)
 -40 to +20 dBm (CW)

Absolute Maximum
(Peak or Avg): +23 dBm (200 mW)
(Damage Limit)

Return Loss (SWR):

	Type N, APC-7	Type K
Below 2 GHz	25 dB (1.12)	25 dB (1.12)
2 to 12.4 GHz	20 dB (1.22)	20 dB (1.22)
12.4 to 18 GHz	16 dB (1.37)	16 dB (1.37)
18 to 26.5 GHz		14 dB (1.50)
26.5 to 40 GHz		10 dB (1.92)

Calibration Factor Uncertainty:

Frequency	Sum of Uncertainties (%)¹	Probable Uncertainties (%)²
Below 10 GHz	2.6%	1.2%
10 to 18 GHz	6.4%	3.7%
18 to 26.5 GHz	10%	6.5%
26.5 to 40 GHz	20%	10%

NOTES:

1. Includes uncertainty of reference standard and transfer uncertainty. Directly traceable to NIST (formerly NBS).
 2. Square root of the sum of the individual uncertainties squared (RSS).
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