

Technical Data

Power Sensor Performance Specifications

Sensor	Frequency Range	CW Dynamic Range (dBm)	SWR ¹	Rise Time ² (ms)	Sensor Linearity ³	RF Connector ⁴
Standard Diode Sensors						
MA2472D	10 MHz to 18 GHz	-70 to +20 CW mode (ML243xA, Profile mode) -37 to +20 ML2490A, Pulse/Mod mode)	< 1.17; 10 MHz to 50 MHz ⁵ < 1.90; 10 MHz to 50 MHz < 1.17; 50 MHz to 150 MHz < 1.12; 150 MHz to 2 GHz < 1.22; 2 GHz to 12.4 GHz < 1.25; 12.4 GHz to 18 GHz < 1.35; 18 GHz to 32 GHz < 1.50; 32 GHz to 40 GHz < 1.63; 40 GHz to 50 GHz	< 0.004	< 1.8%, ≤18 GHz < 2.5%, ≤40 GHz < 3.5%, ≤50 GHz for MA2475D ⁶	N(m)
MA2473D	10 MHz to 32 GHz					K(m)
MA2474D	10 MHz to 40 GHz					K(m)
MA2475D	10 MHz to 50 GHz					V(m)

Temperature accuracy: < 1% < 40 GHz, < 1.5% < 50 GHz, 5 °C to 50 °C

High Accuracy Diode Sensors

MA2442D	10 MHz to 18 GHz	-67 to +20 CW mode -40 to +20 (ML243xA, Profile mode) -34 to +20 ML2490A, Pulse/Mod mode)	< 1.17; 10 MHz to 150 MHz < 1.08; 150 MHz to 2 GHz < 1.16; 2 GHz to 12.4 GHz < 1.21; 12.4 GHz to 18 GHz < 1.29; 18 GHz to 32 GHz < 1.44; 32 GHz to 40 GHz < 1.50; 40 GHz to 50 GHz	< 0.004	< 1.8%, ≤18 GHz < 2.5%, ≤40 GHz < 3.5%, ≤50 GHz for MA2445D ⁷	N(m)
MA2444D	10 MHz to 40 GHz					K(m)
MA2445D	10 MHz to 50 GHz					V(m)

Temperature accuracy: < 1% < 40 GHz, < 1.5% < 50 GHz, 5 °C to 50 °C

Universal Power Sensors

MA2481D	10 MHz to 6 GHz	-60 to +20	< 1.17; 10 MHz to 150 MHz < 1.12; 150 MHz to 2 GHz < 1.22; 2 GHz to 6GHz < 1.22; 6 GHz to 12.4 GHz < 1.25; 12.4 GHz to 18 GHz	< 0.004 with option 1 only	< 3%, ≤6 GHz < 3%, ≤18 GHz (1.8% CW with option 1)	N(m)
MA2482D	10 MHz to 18 GHz					

Option 01 Adds fast CW mode to Universal Power Sensors for high speed measurements of CW signal plus TDMA and pulse measurements.

Temperature accuracy: < 1%, 15 °C to 35 °C

Wideband Sensors

MA2490A ⁸	50 MHz to 8 GHz	CW Mode: -60 to +20 Pulse/Modulated Mode: -30 to +20 (with ML2490A)	< 1.17; 50 MHz to 150 MHz < 1.12; 150 MHz to 2.5 GHz < 1.22; 2.5 GHz to 8 GHz < 1.22; 8 GHz to 12.4 GHz < 1.25; 12.4 GHz to 18 GHz	< 18 ns	< 7% 50 MHz to 300 MHz < 3.5% 300 MHz to 8 GHz	N(m)
MA2491A ⁸	50 MHz to 18 GHz					

Temperature accuracy: < 1% 10 °C to 45 °C

Pulse Sensor

MA2411B	300 MHz to 40 GHz	-20 to +20 dBm	< 1.15; 300 MHz to 2.5 GHz < 1.35; 2.5 GHz to 26 GHz < 1.50; 26 GHz to 40 GHz	< 8 ns typical 12 ns maximum	< 4.5% 300 MHz to 18 GHz < 7% 18 GHz to 40 GHz	K(m)
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Temperature accuracy: < 2% 10 °C to 45 °C

Thermal Sensor

MA24002A	10 MHz to 18 GHz	-30 dBm to +20 dBm	< 1.90; 10 MHz to 50 MHz < 1.17; 50 MHz to 150 MHz < 1.10; 150 MHz to 2 GHz < 1.15; 2 GHz to 12.4 GHz < 1.20; 12.4 GHz to 18 GHz < 1.25; 18 GHz to 32 GHz < 1.30; 32 GHz to 40 GHz < 1.40; 40 GHz to 50 GHz	< 15	1.8% < 18 GHz ⁹ 2.0% < 40 GHz ⁹ 2.5% < 50 GHz ⁹	N(m)
MA24004A	10 MHz to 40 GHz					K(m)
MA24005A	10 MHz to 50 GHz					V(m)

Temperature accuracy: < 1% < 30 GHz < +10 dBm, < 1.5% ≥30 GHz ≥ +10 dBm