

Biased Schottky Diode Detectors 100 MHz to 26.5 GHz

FEATURES

- > High Sensitivity
- > Extremely Flat Response
- > Ultra Wideband and Ultra Fast
- > Low Video Output Resistance (350 Ω Typ.)
- > High Reliability Hermetically Sealed Modules

Maximum Input Power: 200mW CW
 Operating Temperature Range: -0°C to +50°C
 Storage Temperature Range: -65°C to +125°C
 Bias Level: 100 μ A typ.
 Specification @ +25°C and -20 dBm Input Power

Model No.	Frequency (GHz)	Voltage Sensitivity (mV/mW Typ.)	Tss ³ (dBm Typ.)	Flatness (\pm dB Max.)	Video Capacitance(pF)
Broad Band Detectors					
ESS0120	0.1 - 2.0	2000	-52	0.50	470
ESS0140	0.1 - 4.0	2000	-52	0.80	470
ESS0112	0.1 - 12.4	1800	-52	1.00	470
ESS1018	1.0 - 18.0	1500	-52	1.50	50
ESS2026	2.0 - 26.0	1000	-52	2.00	20
ESS2018	2.0 - 18.0	1600	-52	1.00	20
ESS6018	6.0 - 18.0	1600	-52	0.80	10
ESS8018	8.0 - 18.0	1600	-52	0.60	10
Octave Band Detectors					
ESS0510	0.5 - 1.0	1800	-54	0.50	100
ESS0714	0.7 - 1.4	1800	-54	0.30	100
ESS1020	1.0 - 2.0	2000	-52	0.50	50
ESS2040	2.0 - 4.0	2000	-52	0.50	20
ESS2550	2.5 - 5.0	2000	-52	0.50	20
ESS4080	4.0 - 8.0	2000	-52	0.50	20
ESS5010	5.0 - 10.0	1800	-52	0.80	20
ESS6012	6.0 - 12.0	1800	-52	0.60	10
ESS8012	8.0 - 12.0	1800	-52	0.50	10
ESS8016	8.0 - 16.0	1800	-52	0.60	10
ESS1218	12.0 - 18.0	1800	-52	0.50	10
ESS1826	18.0 - 26.5	1500	-52	1.00	5
Narrow Band Detectors					
ESS1724	1.7 - 2.4	2000	-52	0.20	50
ESS2223	2.2 - 2.3	2000	-52	0.20	20
ESS3742	3.7 - 4.2	2000	-52	0.20	20
ESS5459	5.4 - 5.9	2000	-52	0.20	20
ESS5865	5.8 - 6.5	2000	-52	0.25	20
ESS7585	7.5 - 8.5	1800	-52	0.25	20
ESS8596	8.5 - 9.6	1800	-52	0.25	10
ESS1014	10.0 - 14.0	1800	-52	0.30	10
ESS1315	13.0 - 15.0	1800	-52	0.30	10
ESS1416	14.0 - 16.0	1500	-52	0.40	10
ESS1618	16.0 - 18.0	1500	-50	0.50	5

1. Negative output polarity is standard. Add P to end of model number for positive polarity.

2. Add suffix to end of model number for Package Style. Example: ESS6018PA3 •Positive polarity, and Package Style "A3".

3. Measured with a 2 MHz bandwidth and 3 dB noise figure video amplifie.