

Low Barrier Schottky Detectors

- ◆ *High sensitivity*
- ◆ *Zero bias*



DESCRIPTION

Are used as power sensors and for special purposes.
They are used in automatic power regulation systems

of signal generators and frequency synthesizers, in receiving devices for LF envelope isolation of RF signals and in panoramic and pulse measurements.

SPECIFICATIONS

COAXIAL DETECTORS

Characteristics	Model		
	KDK-18	KDK-26	KDK-40
Frequency range, GHz	0.01-18	0.01-26.5	0.01-40
Input connector	N(m)	SMA(m)	K(m) or 2.4 mm(m)
Output connector	SMA(f)	SMA(f)	SMA(f)
Typical video sensitivity, mV/mW	300	300	300
Minimum video sensitivity, mV/mW	200	200	200
Typical flatness, dB	±0.5	±0.5	±1.0
Typical TSS at 1 kHz (bw 40 Hz), dBm*	-55	-55	-55
Typical video bandwidth, MHz**	10	10	10
Video output load, megaohm	1	1	1
Incident RF power, dBm (CW max)	+20	+20	+20

WAVEGUIDE DETECTORS

Characteristics	Model							
	KDW-42	KDW-28	KDW-22	KDW-19	KDW-15	KDW-10	KDW-08	KDW-06
Frequency range, GHz	18-26.5	26.5 - 40	33-50	40-60	50-75	75-110	90 -140	110-170
Input waveguide	WR-42	WR-28	-WR-22	WR-19	WR-15	WR-10	WR-8	WR-6
Waveguide flange	UG-595/U	UG-599/U	UG-383/U	UG-383/U	UG-385/U	UG-387/U-M	UG-387/U-M	UG-387/U-M
Typical video sensitivity, mV/mW	4000	3500	3000	2500	2000	1500	1200	500
Minimum video sensitivity, mV/mW	2500	2000	1500	1200	1000	700	500	300
Typical flatness, dB	±1.0	±1.0	±1.0	±1.0	±1.5	±2.0	±2.0	±2.5
Typical TSS at 1 kHz (bw 40 Hz), dBm*	-55	-55	-50	-50	-50	-45	-42	-42
Typical video bandwidth, MHz**	10	10	10	10	10	10	10	10
Video output load, megaohm	1	1	1	1	1	1	1	1
Incident RF power, dBm (CW max)	+20	+20	+20	+20	+20	+20	+20	+20

* Output connector SMA(f)

** TSS is defined as the signal level at which the video output is 8 dB greater than the noise level. Detectors are not tested for TSS.

*** Video bandwidth is 1 MHz typical when terminated into a 50 Ω load. The video sensitivity drops to 50 mV/mW typical.

