

MODULATORS I & Q



FLAT PACK MODELS

CARRIER FREQUENCY (MHz)	MODULATION FREQUENCY (MHz)	CARRIER POWER (dBm) NOM	CONVERSION LOSS (dB) MAX	SSB REJECTION (dB) MIN	LO/RF ISOLATION (dB) MIN	INPUT 1 dB COMP. PT. (dBm) MIN	INPUT IP ₃ (dBm) TYP	PACKAGE	PIN-OUT (See Below)	MODEL
28.5 - 31.5	DC-15	+10	8.0	30	45	0	+15	115	1	SMF-201
57 - 63	DC-30	+10	8.0	30	45	0	+15	115	1	SMF-202
66.5 - 73.5	DC-35	+10	8.0	30	45	0	+15	115	1	SMF-203
40 - 80	DC-40	+10	8.0	30	45	0	+15	115	1	SMF-204
80 - 160	DC-80	+10	8.0	30	45	0	+15	115	1	SMF-205
100 - 200	DC-100	+10	8.0	30	45	0	+15	115	1	SMF-206



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COAXIAL (SMA) CONNECTOR MODELS

CARRIER FREQUENCY (MHz)	MODULATION FREQUENCY (MHz)	CARRIER POWER (dBm) NOM	CONVERSION LOSS (dB) MAX	SSB REJECTION (dB) MIN	LO/RF ISOLATION (dB) MIN	INPUT 1 dB COMP. PT. (dBm) MIN	INPUT IP ₃ (dBm) TYP	PACKAGE	PIN-OUT (See Below)	MODEL
15 - 510	DC-250	+10	9.0	15	35	0	+15	153	2	SMK-34-15
28.5 - 31.5	DC-15	+10	8.0	30	45	0	+15	113	2	SMK-701*
57 - 63	DC-30	+10	8.0	30	45	0	+15	113	2	SMK-702*
66.5 - 73.5	DC-35	+10	8.0	30	45	0	+15	113	2	SMK-703*
40 - 80	DC-40	+10	8.0	30	45	0	+15	113	2	SMK-704*
80 - 160	DC-80	+10	8.0	30	45	0	+15	113	2	SMK-705*
100 - 200	DC-100	+10	8.0	30	45	0	+15	113	2	SMK-706*

*Select female connector suffix: S=SMA, B=BNC, N=Type N, T=TNC.
All other models numbers are available with SMA connectors only.

Notes:

- SSB rejection based on optimum input quadrature signals.
- Conversion Loss is the difference between total power of both modulation inputs, and desired sideband output.
- USB is suppressed when MOD.1 is +90° ref to MOD.2.
- LSB is suppressed when MOD.1 is -90° ref to MOD.2.
- Nominal impedance = 50 ohms.
- Maximum RF input power without damage 200 mW.

PIN-OUT TABLE

	CARRIER	OUTPUT	MOD ₁	MOD ₂	CASE GND
#1	1	14	10	5	All Other
#2	1	3	2	4	-

For pin location and package outline drawings, see back pages.