

I/Q MODULATORS / DEMODULATORS

Features

- Octave bandwidth
- Good phase and amplitude balance

Main characteristics

- Operating and storage temperature : - 55° C / + 100° C
- Soldering heat : 10 s at 265° C
- Total input power : 1 W
- Impedance : 50 Ω nominal
- LO Carrier suppression : 30 dBc minimum
- SSB rejection : 30 dBc minimum

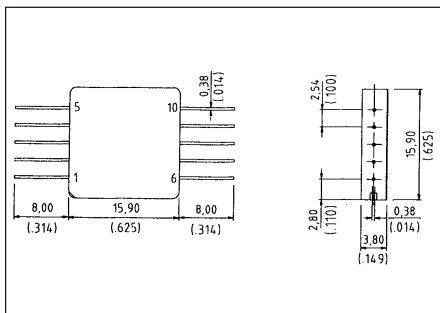
Ordering information

- To specify a demodulator, add a «D» at the end of the part number.

Example : F56010-01D

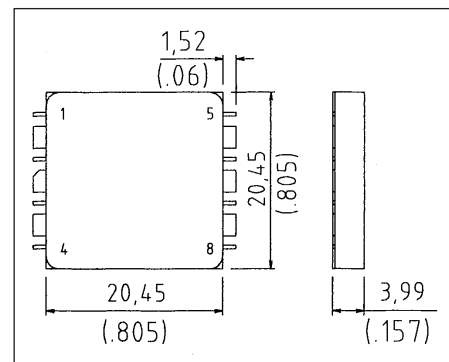
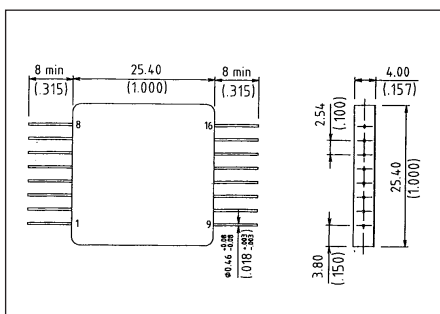
- To specify a QPSK modulator or demodulator, please consult our local sales office.

Case drawings



Pin connection

	FP4	FP5	SMM4
LO	5	8	1
RF	1	1	4
I	6	9	8
Q	10	16	5
GND	Others	Others	Others





Level 3 (+ 3 dBm Carrier Level)

Model N°	Frequency (MHz)		Conversion loss (dB) Max.	Amplitude unbalance (dB)		Phase unbalance (Deg)		Isolation (dB)		Package
	LO-RF FL-FU	I / Q		Typ.	Min.	Typ.	Max.	FO-RF	LO-IF	
			Min.					Min.		
F56010-01	55 - 66	DC - 10	10.5	0.15	0.4	1	2	40	35	FP5
F56010-02	66 - 78	DC - 15	10.5	0.15	0.4	1	2	40	35	FP5
F56011-02	66 - 78	DC - 10	10.5	0.15	0.4	1	2	40	35	FP4

LO Carrier Suppression : 30 dBc minimum

SSB Rejection : 30 dBc minimum

Level 10 (+ 10 dBm Carrier Level)

Model N°	Frequency (MHz)		Conversion loss (dB) max.	Amplitude unbalance (dB)		Phase unbalance (Deg)		Isolation (dB)		Package
	LO-RF FL-FU	I / Q		Typ.	Min.	Typ.	Max.	FO-RF	LO-IF	
			Min.					Min.		
F56011	40-80	DC-20	10.5	0.15	0.4	1	2	40	35	FP4
F56010	20-40	DC-15	10.5	0.15	0.4	1	2	40	35	FP5
F56012	80-160	DC-40	10.5	0.5	1	1	3	35	30	FP5
F56013	110-250	DC-50	10.5	0.5	1	1	3	35	30	FP5
F56014	250-500	DC-50	10.5	0.5	1	1	4	35	30	FP5
F56015	850-950	DC-50	10.5	0.5	1	1	4	35	30	FP5
C56010	20-40	DC-15	10.5	0.15	0.4	1	2	40	35	SMM4
C56011	40-80	DC-20	10.5	0.15	0.4	1	2	40	35	SMM4
C56012	80-160	DC-40	10.5	0.5	1	1	3	35	30	SMM4
C56013	110-250	DC-50	10.5	0.5	1	1	3	35	30	SMM4
C56014	250-500	DC-50	10.5	0.5	1	1	4	35	30	SMM4
C56015	850-950	DC-50	10.5	0.5	1	1	4	35	30	SMM4