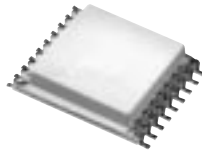


BLUE CELL™ I/Q Modulator

LO Drive +10dBm, 1800 to 2000 MHz



IQBG-2000



CASE STYLE: SM20

Features

- excellent temperature stability
- low noise floor

Applications

- PCS
- feed forward amplifiers

Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		CONVERSION LOSS (dB)			CARRIER REJECTION (-dBc)		SIDE BAND REJECTION (-dBc)		HARMONIC SUPPRESSION (-dBc)				CASE STYLE	CASE STYLE	PRICE \$
	RF (signal)/ LO (carrier)	I&Q Min. Max.	\bar{X}	σ	Max.	Typ.	Min.	Typ.	Min.	LO±3/Q	LO±5/Q	Typ.	Min.			
IQBG-2000	1800-2000	DC 10	7.5	—	9.0	30	20	34	28	50	45	70	50	SM20	Im	39.95

Notes:
Q=I+90, lower sideband suppression
Tested @ I/Q power -10 dBm

BLUE CELL™ is protected by U.S. Patents.

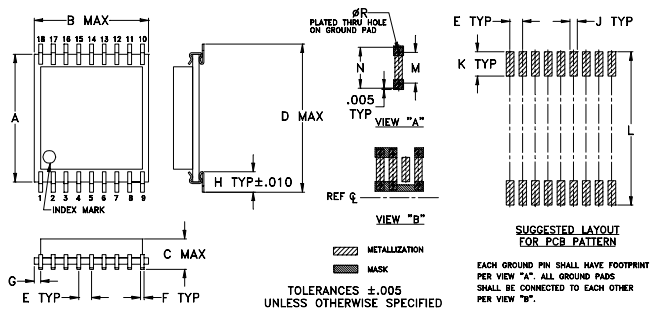
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	20 dBm max.

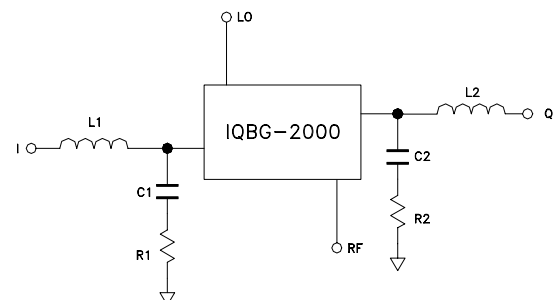
Pin Configuration

PORT	Im
LO (carrier)	9
RF (signal)	14
I(0°)(ref)	10
Q(90°)	18
GROUND	all others

Outline Drawing



Recommended IF diplexer



L1, L2 33nH CHIP INDUCTOR (1206)
C1, C2 10pF NPO CHIP CAPACITOR (0603)
R1, R2 47 Ω 5% CHIP RESISTOR (0603)

Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H	J
.500	.460	.130	.575	.050	.015	.025	.070	.030
12.70	11.68	3.30	14.61	1.27	.38	.635	1.78	.76
K	L	M	N	P	Q	R	wt.	
.095	.600	.120	.160	—	—	.012	grams	
2.41	15.24	3.05	4.06	—	—	.30	.5	