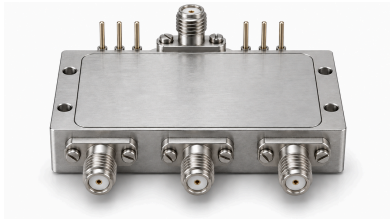


30 MHz–6 GHz PIN Diode SP3T RF Switch Module

PIN diode SP3T module for RF path selection from 30 MHz to 6 GHz. Insertion loss is 3 dB typical and 3.5 dB maximum; isolation is 80 dB typical and switching time 200 ns typical.



Electrical specifications

Parameter	Value	Unit	Notes
Frequency range	30–6000	MHz	-
Insertion loss	3 /3.5	dB	Typical: 3 dB; Maximum: 3.5 dB
VSWR	2.0	-	Maximum: 2
Isolation	80	dB	Typical: 80 dB
Switching time	200	ns	Typical: 200 ns
CW RF power	30	dBm	Maximum: 30 dBm

Absolute maximum ratings

Parameter	Value	Unit
RF input level without damage	+30 (Maximum: 30 dBm)	dBm

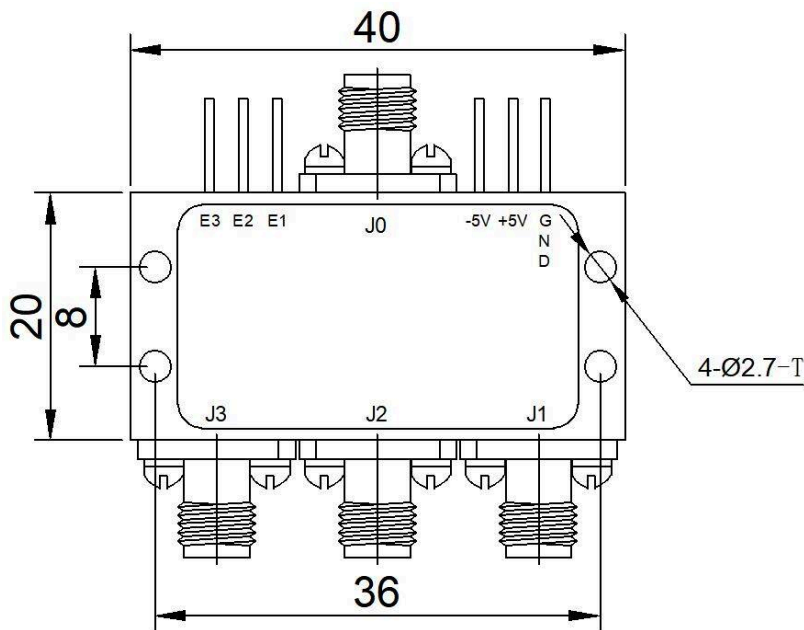
Environmental design targets

Parameter	Value	Unit
Operating temperature	–20–+50 (Design target)	°C
Storage temperature	–25–+125 (Design target)	°C

Mechanical specifications

Parameter	Value	Unit
Dimensions	40 × 20 × 10.2	mm
Weight	25 (Typical: 25 g)	g

Mechanical Outline



All dimensions are in mm [in].

Power and control interfaces

Parameter	Value	Unit
RF input J0	SMA female	-
RF outputs J1/J2/J3	SMA female	-
DC connector	Feed-through pin	-
Ground connection	Ground pole pin	-
Positive supply rail	+5	V
Negative supply rail	-5	V
Ground	GND	-
TTL high level	3.3 /5	V
TTL low level	0	V
Control bits	E1, E2, E3	-

TTL selection truth table

Parameter	Value	Unit
E3/E2/E1 =110	J0 → J1	-
E3/E2/E1 =101	J0 → J2	-
E3/E2/E1 =011	J0 → J3	-

Document notice

Specifications are subject to revision. Before design release, confirm the current document revision and product-specific requirements with LCRF. The approved quotation and order documentation define the supplied configuration.