

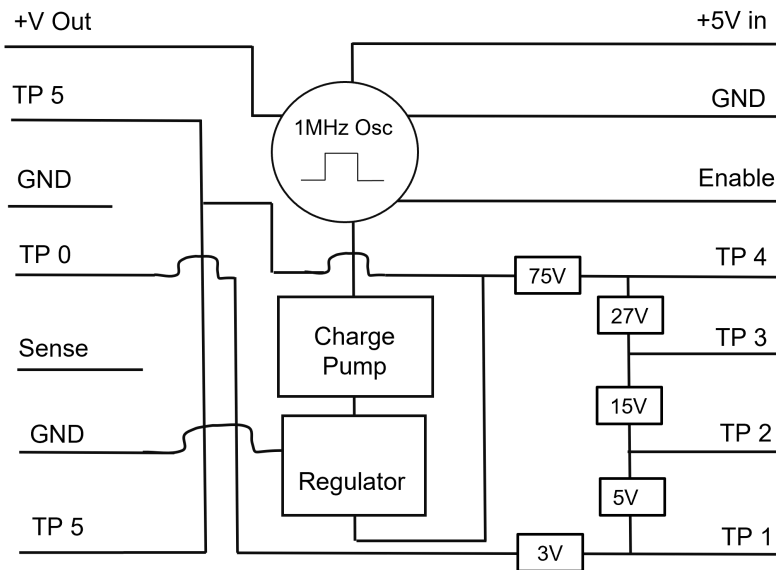
GENERAL DESCRIPTION

The MCI050P125D14A is a charge-pump multiplier featuring +125V output suited for driving SP2T PIN diode switches. Operating from a +5V supply voltage, the MCI050P125D14A uses multiple stages to multiply the +5V into a regulated +125V at up to 4mA out. The charge pump has a logic enable which can be left unconnected or driven hi (3.3 to 5V) for normal operation, or apply a logic low to disable the charge pump. Five testpoint pins allow for lower voltage outputs in 5V increments, +125V to +25V

FEATURES

- 1 MHz Oscillator
- 12mm x 6mm x 1.8mm DFN
- Output -125V at 4 mA
- Compatible with:

FUNCTION BLOCK DIAGRAM

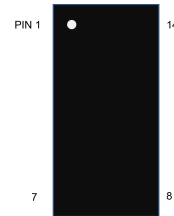


MECHANICAL

The MCI050P125D14A consists of discrete active and passive components on a laminate substrate and encapsulated using a transfer mold process. This forms a .48" x .24" 14 lead DFN SMT assembly designed for integration into an integrated microwave assembly.

ECCN Code EAR99

MCI050P125D14A is RoHS 3 (EU 2015/863) compliant.



PIN CONNECTIONS

- 1 +125V
- 2 Testpoint 5
- 3 Ground
- 4 Testpoint 0
- 5 Sense
- 6 Ground
- 7 Testpoint 5
- 8 Testpoint 1
- 9 Testpoint 2
- 10 Testpoint 3
- 11 Testpoint 4
- 12 Enable (high)
- 13 Ground
- 14 Input +5V

TRUTH TABLE

EN -VOUT

1 +125v

0 High Z

ELECTRICAL SPECIFICATIONS Vpos +5V

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
ENVIRONMENTAL						
To	Operating Temperature		-45		125	Deg C
Ts	Storage Temperature		-55		150	Deg C
OUTPUT						
IO_hi_boost	Output Current			4		mA
Npk	Noise	1 uF external Bypass Capacitor mounted <.050" from package		50		mVpk
VO	Voltage Output		120	125	129	V
SUPPLY						
V+	Supply Voltage		4.5	5	5.5	V
Iq	Supply Quiescent Current	No load (Iout = 0mA)			17	mA
DYNAMIC						
F	Oscillator frequency		.9	1	1.5	MHz

ESD Sensitivity HBM Class1B

MECHANICAL SPECIFICATIONS

DRAWING NOT TO SCALE. DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE NOTED.

MSL RATING 4 (refer to JEDEC STD 033B)

Shipping Packaging

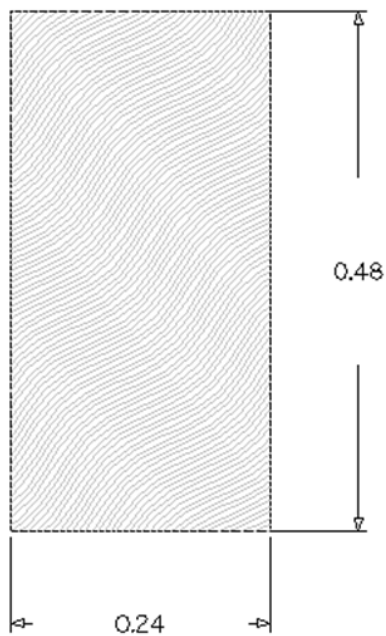
4" Waffle Packs/trays

MARKING SPECIFICATIONS

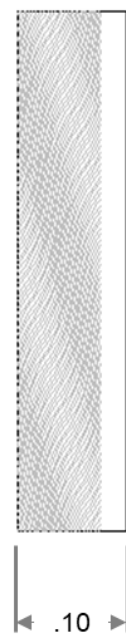
Part Number: GX721

Date Code: YYWW

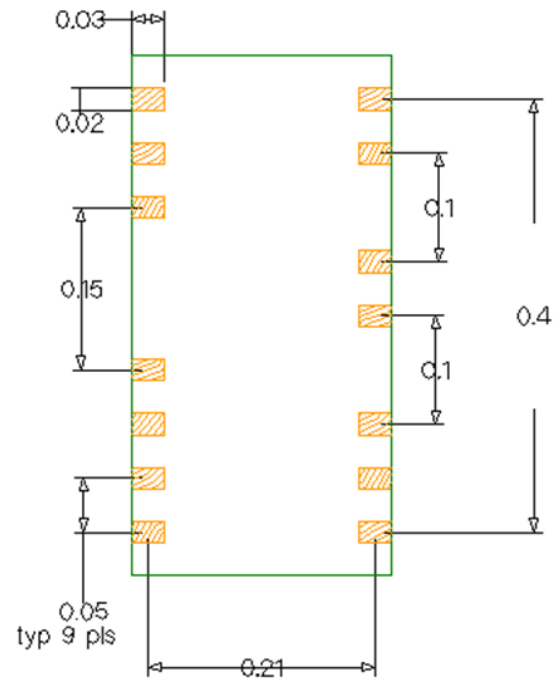
TOP VIEW



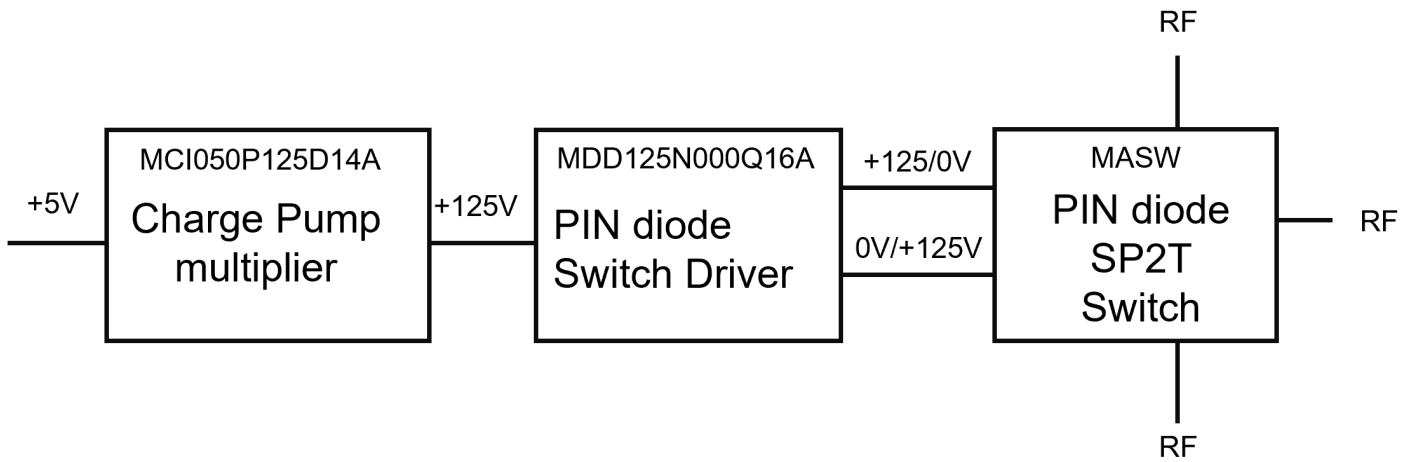
SIDE VIEW



BOTTOM VIEW

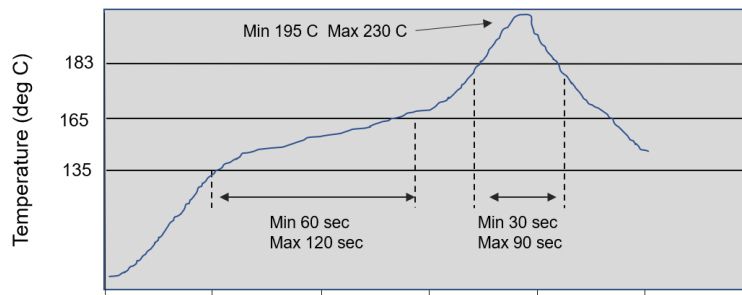


TYPICAL APPLICATION

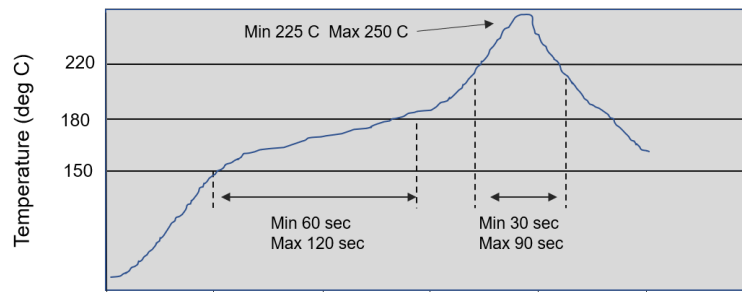


SOLDER PROFILE

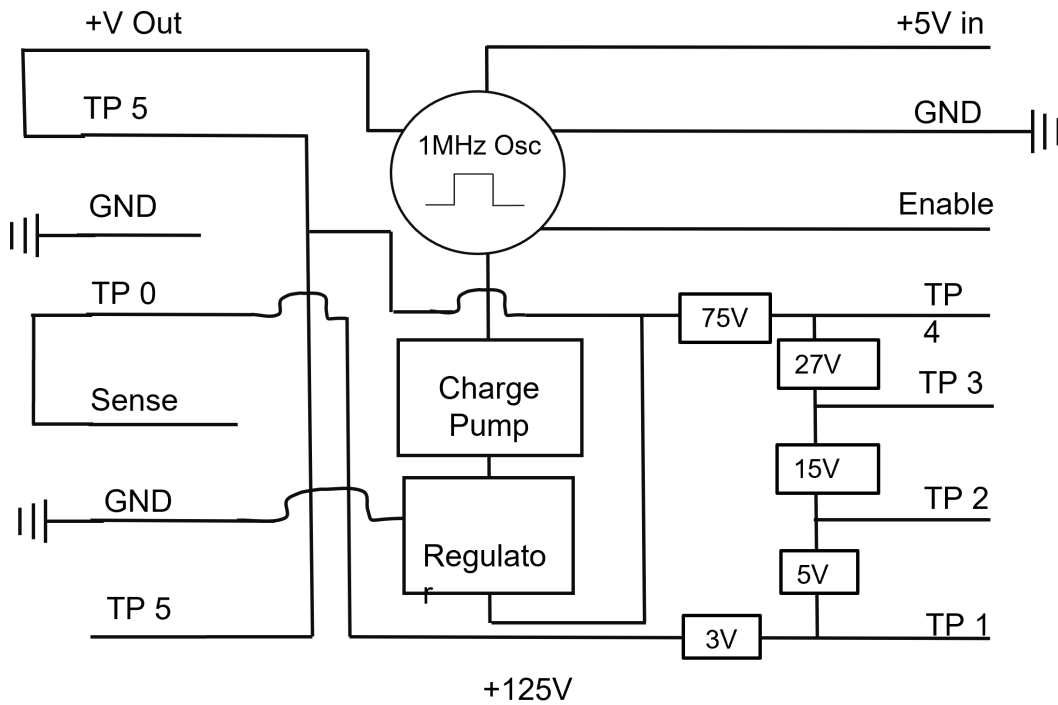
SnPb Temperature Profile example



Pb-Free Temperature Profile example



CONNECTION CHART



CONNECTION CHART

