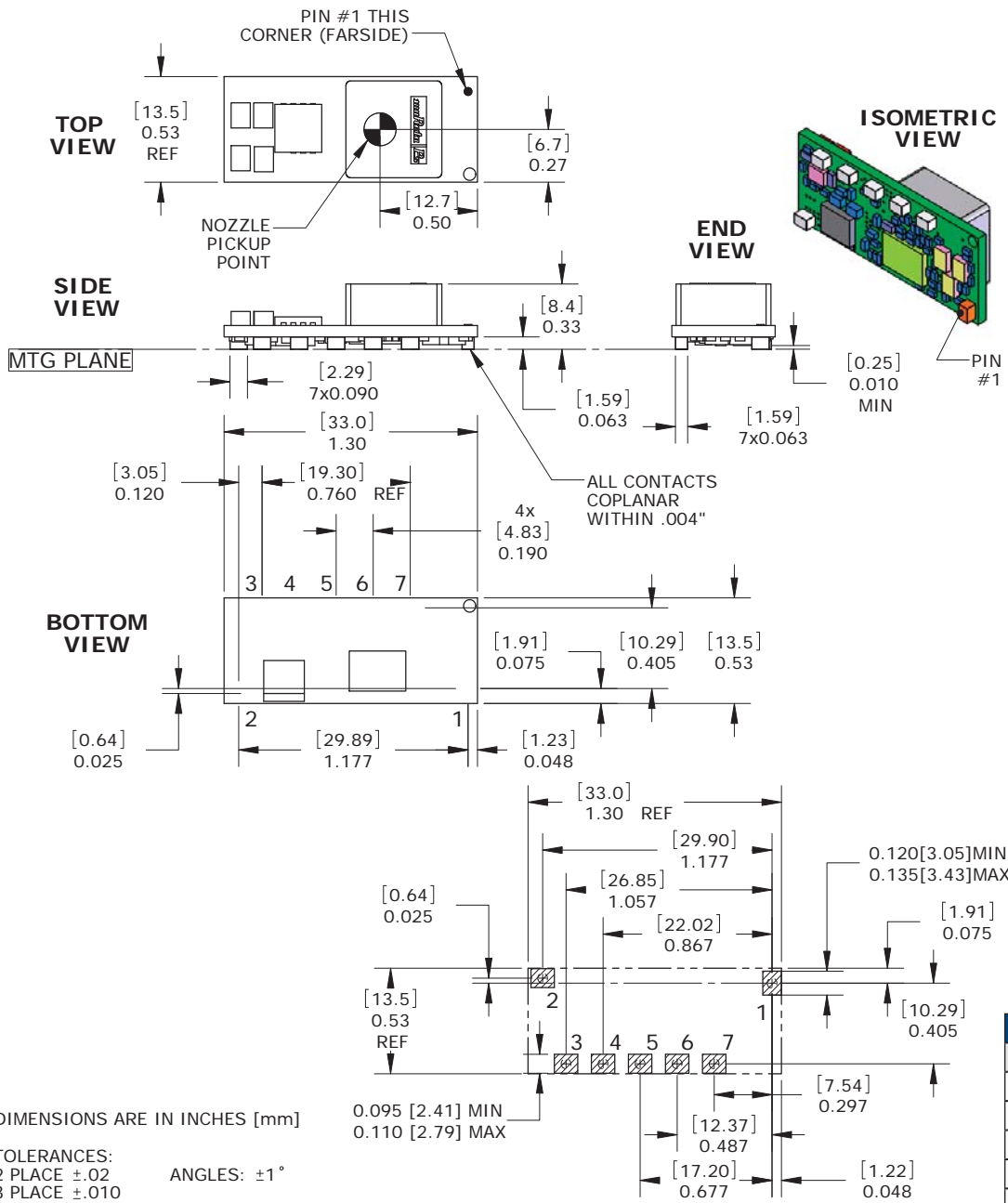


MECHANICAL SPECIFICATIONS



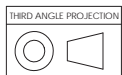
DIMENSIONS ARE IN INCHES [mm]

TOLERANCES:
 2 PLACE ±.02 ANGLES: ±1°
 3 PLACE ±.010

COMPONENTS SHOWN ARE FOR REFERENCE ONLY

MATERIAL:
 SMT PINS: COPPER ALLOY

FINISH: (ALL PINS)
 GOLD (5u"MIN) OVER NICKEL (50u" MIN)



I/O CONNECTIONS	
Pin	Function P66
1	On/Off Control *
2	+Vin
3	Vtrack Seq**
4	Gnd (Common)
5	+Vout
6	Trim
7	Sense

* The Remote On/Off can be provided with either positive (P suffix) or negative (N suffix) polarity.
 ** Vtrack Seq applies only to OKY2 models. No connection for OKY models.

Performance and Functional Specifications

See Note 1

Input	
Input Voltage Range	See Ordering Guide.
Start-Up Voltage	8.00V
Undervoltage Shutdown (see Note 15)	7.75V)
Overvoltage Shutdown	None
Reflected (Back) Ripple Current (Note 2)	20 mA pk-pk
Internal Input Filter Type	Capacitive
Recommended External Fuse	15A (T/10); 20A (T/16)
Reverse Polarity Protection	N/A. See fuse information
Input Current:	
Full Load Conditions	See Ordering Guide
Inrush Transient	0.4 A ² Sec.
Shutdown Mode (Off, UV, OT)	5 mA
Output in Short Circuit	100 mA (T/10); 60 mA (T/16)
No Load	80 mA
Low Line (Vin=Vmin, Vout=Vnom)	6.34 A (T/10); 10.2 A (T/16)
Remote On/Off Control (Note 5)	
Negative Logic ("N" model suffix)	ON = Open pin or ground to +0.3V. max. OFF = +2.5V min. to + Vin (max)
Positive Logic ("P" model suffix)	ON = Open pin to +Vin max. (internally pulled up) OFF = Ground pin to +0.3V. max.
Current	1 mA max.
Tracking/Sequencing	
Slew Rate	2 Volts per millisecond, max.
Tracking accuracy, rising input	Vout = +/-100 mV of Sequence In
Tracking accuracy, falling input	Vout = +/-200 mV of Sequence In
General and Safety	
Efficiency	See Ordering Guide
Switching Frequency	300 KHz ± 25 kHz
Start-Up Time (Vin on to Vout regulated) (On/Off to Vout regulated)	8 mSec for Vout=nominal 8 mSec for Vout=nominal
Isolation	Not isolated
Safety	Meets UL/cUL 60950-1, CSA-C22.2 No. 60950-1, IEC/EN 60950-1
Calculated MTBF	See table on page 17.
Output	
Output Voltage Range	0.7525 to 5.5 V
Minimum Loading	No minimum load
Accuracy (50% load, untrimmed)	±2 % of Vnominal
Overvoltage Protection (Note 16)	None
Temperature Coefficient	±0.02% per oC of Vout range
Ripple/Noise (20 MHz bandwidth)	See Ordering Guide and note 8
Line/Load Regulation	See Ordering Guide and note 10
Maximum Capacitive Loading (Note 14)	
Cap-ESR=0.001 to 0.01 Ohms	1,000 µF
Cap-ESR >0.01 Ohms	5,000 µF
Current Limit Inception (Note 6) (98% of Vout setting, after warm up)	27 Amps (T/10); 33 Amps (T/16)
Short Circuit Mode	
Short Circuit Current Output	2 A
Protection Method	Hiccup autorecovery upon overload removal. (Note 17)

Output, continued	
Short Circuit Duration	Continuous, no damage (output shorted to ground)
Prebias Startup	Converter will start up if the external output voltage is less than Vset
Dynamic Load Response (50-100% load step, di/dt=2.5A/µSec)	75 µSec max. to within ±2% of final value
Environmental	
Operating Temperature Range (Ambient) See derating curves	-40 to +85° C. with derating (Note 9)
Operating PC Board Temperature	-40 to +100° C. max., no derating (12)
Storage Temperature Range	-55 to +125° C.
Thermal Protection/Shutdown	+130° C.
Relative Humidity	to 85%RH/+85° C., non-condensing
Physical	
Outline Dimensions	See Mechanical Specifications
Weight	0.1 ounces (2.8 grams)
Electromagnetic Interference	Designed to meet FCC part 15, class B, EN55022 and CISPR22 class B radiated (may need external filter)
Restriction of Hazardous Substances	RoHS-6 (does not claim EU RoHS exemption 7b-lead in solder)
MSL Rating	2
Absolute Maximum Ratings	
Input Voltage (Continuous or transient) On/Off Control	0 V.to +15 Volts max. (D12 models) 0 V. min. to +Vin max.
Input Reverse Polarity Protection	See Fuse section
Output Current (Note 7)	Current-limited. Devices can withstand a sustained short circuit without damage. The outputs are not intended to accept appreciable reverse current.
Storage Temperature	-55 to +125° C.
Lead Temperature	See soldering specifications

Absolute maximums are stress ratings. Exposure of devices to greater than any of any of these conditions may adversely affect long-term reliability. Proper operation under conditions other than those listed in the Performance/Functional Specifications Table is not implied nor recommended.

Specification Notes:

- Specifications are typical at +25 deg.C, Vin=nominal (+12V. for D12 models), Vout=nominal (+5V for D12 models), full load, external caps and natural convection unless otherwise indicated. Extended tests at higher power must supply substantial forced airflow.
All models are tested and specified with external 1 µF paralleled with 10 µF ceramic/tantalum output capacitors and a 22 µF external input capacitor. All capacitors are low ESR types. These capacitors are necessary to accommodate our test equipment and may not be required to achieve specified performance in your applications. However, Murata Power Solutions recommends installation of these capacitors. All models are stable and regulate within spec under no-load conditions.
- Input Back Ripple Current is tested and specified over a 5 Hz to 20 MHz bandwidth. Input filtering is Cin=2 x 100 µF tantalum, Cbus=1000 µF electrolytic, Lbus=1 µH.
- Note that Maximum Power Derating curves indicate an average current at nominal input voltage. At higher temperatures and/or lower airflow, the DC/DC converter will tolerate brief full current outputs if the total RMS current over time does not exceed the Derating curve.
- Deleted