MIC5365/6

High-Performance Single 150 mA LDO

Features

- 2.5V to 5.5V Input Voltage Range
- 150 mA Guaranteed Output Current
- Stable with 1 µF Ceramic Output Capacitors
- Low Dropout Voltage (155 mV at 150 mA)
- Excellent Load/Line Transient Response
- Low Quiescent Current: 29 µA
- High PSRR: 70 dB
- Output Discharge Circuit: MIC5366
- High Output Accuracy
  - ±2% Initial Accuracy
- Thermal Shutdown and Current Limit Protection
- Tiny 1 mm × 1 mm Thin DFN, SC-70-5, and Thin SOT23-5 Packages

Applications

- Mobile Phones
- Digital Cameras
- GPS, PMP, PDAs, and Handhelds
- Portable Electronics

General Description

The MIC5365/6 are advanced general purpose linear regulators offering high power supply rejection (PSRR) in an ultra-small 1 mm × 1 mm package. The MIC5366 includes an auto-discharge feature that is activated when the enable pin is low. The MIC5365/6 is capable of sourcing 150 mA output current and offers high PSRR making it an ideal solution for any portable electronic application.

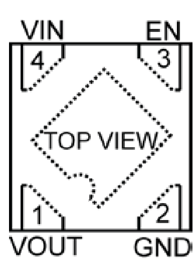
Ideal for battery-powered applications, the MIC5365/6 offers 2% initial accuracy, low dropout voltage (155 mV @ 150 mA), and low ground current (typically 29 µA). The MIC5365/6 can also be put into a zero-off-mode current state, drawing virtually no current when disabled.

The MIC5365/6 is available in several advanced packages including a lead-free (RoHS-compliant) 1 mm × 1 mm Thin DFN occupying only 1 mm^2 of PCB area, a 75% reduction in board area compared to SC-70 and 2 mm × 2 mm TDFN packages. It is also available in a thin SOT23-5 package.

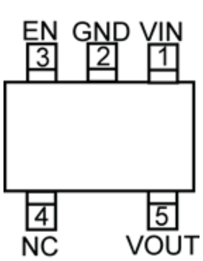
The MIC5365/6 have an operating junction temperature range of –40°C to 125°C.

Package Types

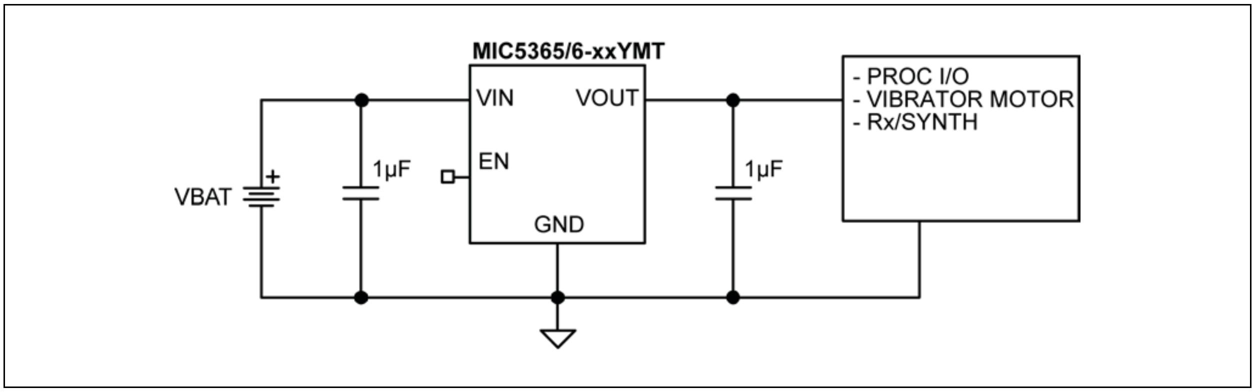
MIC5365/6
4-Lead TDFN (MT)



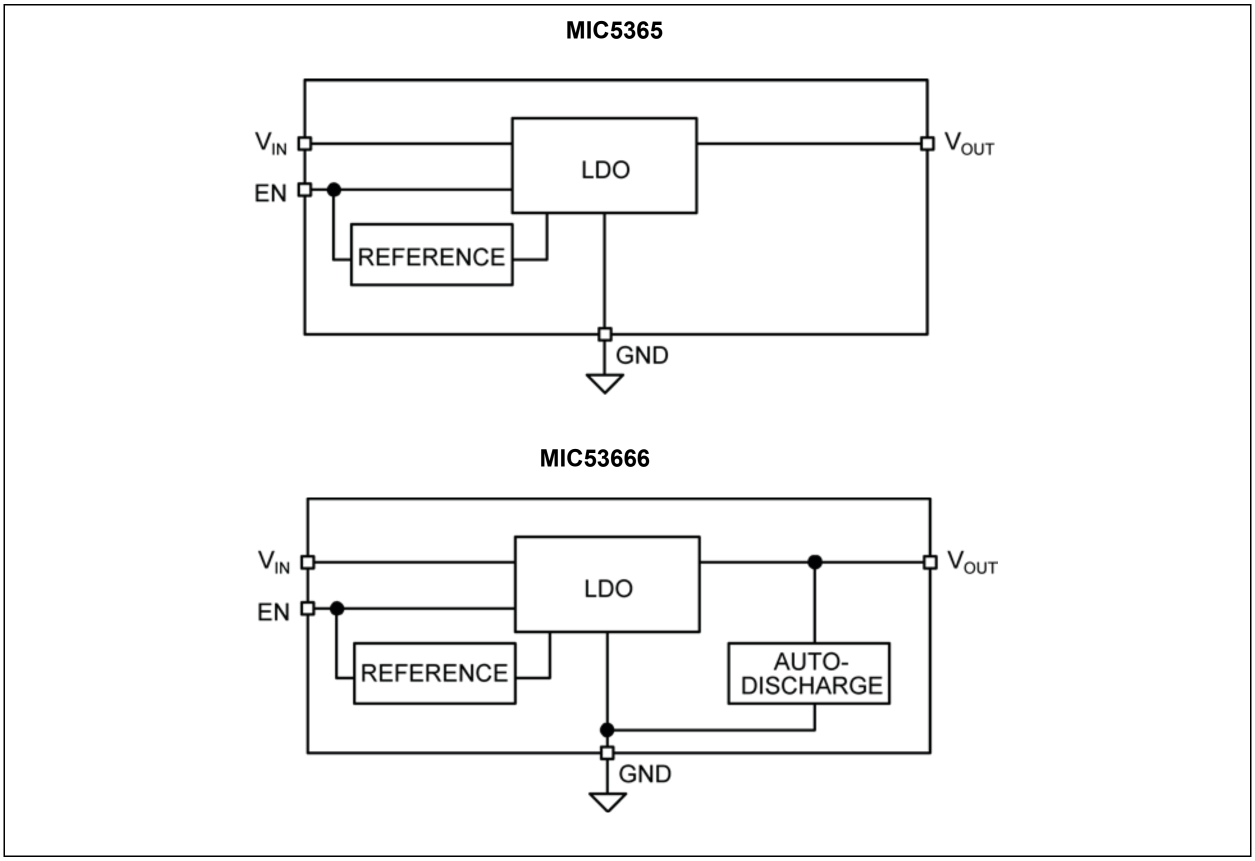
MIC5365/6
5-Lead TSOT23-5 (D5)
5-Lead SC-70 (C5)



Typical Application Circuit



Functional Block Diagrams



1.0 ELECTRICAL CHARACTERISTICS

Absolute Maximum Ratings †

Supply Voltage (V_{IN}) .... 0V to +6V
Enable Voltage (V_{EN}) .... 0V to V_{IN}
Power Dissipation (P_D), Note 1 .... Internally Limited
ESD Rating, Note 2 .... 2 kV

Operating Ratings ‡

Supply Voltage (V_{IN}) .... +2.5V to +5.5V
Enable Voltage (V_{EN}) .... 0V to V_{IN}

† Notice: Stresses above those listed under “Absolute Maximum Ratings” may cause permanent damage to the device. This is a stress rating only and functional operation of the device at those or any other conditions above those indicated in the operational sections of this specification is not intended. Exposure to maximum rating conditions for extended periods may affect device reliability.

‡ Notice: The device is not guaranteed to function outside its operating ratings.

Note 1: The maximum allowable power dissipation of any T_A (ambient temperature) is $P_{D(MAX)} = (T_{J(MAX)} – T_A)/\theta_{JA}$. Exceeding the maximum allowable power dissipation will result in excessive die temperature, and the regulator will go into thermal shutdown.

2: Devices are ESD sensitive. Handling precautions are recommended. Human body model, 1.5 kΩ in series with 100 pF.

ELECTRICAL CHARACTERISTICS

Electrical Characteristics: $V_{IN} = V_{EN} = V_{OUT}$ + 1V; $C_{IN} = C_{OUT}$ = 1 µF; I_{OUT} = 100 µA; T_A = +25°C; **Bold** values are valid for –40°C to +125°C unless noted. **(Note 1)**.

Parameters	Symbol	Min.	Typ.	Max.	Units	Conditions
Output Voltage Accuracy	V_{OUT}	–2.0	—	+2.0	%	Variation from nominal V_{OUT}
		–3.0	—	**+3.0**		Variation from nominal V_{OUT}; –40°C to +125°C
Line Regulation	$\Delta V_{OUT}/V_{OUT}$	—	0.02	**0.3**	%	$V_{IN} = V_{OUT}$ +1V to 5.5V; I_{OUT} = 100 µA
Load Regulation	$\Delta V_{OUT}/V_{OUT}$	—	0.3	1	%	I_{OUT} = 100 µA to 150 mA
Dropout Voltage	V_{DO}	—	55	**110**	mV	I_{OUT} = 50 mA; V_{OUT} ≥ 2.8V
		—	155	**310**		I_{OUT} = 150 mA; V_{OUT} ≥ 2.8V
		—	60	**135**		I_{OUT} = 50 mA; V_{OUT} < 2.8V
		—	180	**380**		I_{OUT} = 150 mA; V_{OUT} < 2.8V
Ground Pin Current	I_{GND}	—	29	**39**	µA	I_{OUT} = 0 mA
Ground Pin Current in Shutdown	I_{SHDN}	—	0.05	1	µA	V_{EN} ≤ 0.2V
Ripple Rejection	PSRR	—	80	—	dB	f = up to 1 kHz; C_{OUT} = 1 µF
		—	65	—		f = 1 kHz to 10 kHz, C_{OUT} = 1 µf
Current Limit	I_{LIM}	200	325	550	mA	V_{OUT} = 0V
Output Voltage Noise	e_N	—	200	—	μV_{RMS}	C_{OUT} = 1µF, 10 Hz to 100 kHz
Auto-Discharge NFET Resistance	R_{DSCG}	—	30	—	Ω	MIC5366 Only; V_{EN} = 0V; V_{IN} = 3.6V, I_{OUT} = –3 mA
Enable Inputs						
Enable Input Voltage	V_{IL}	—	—	**0.2**	V	Logic Low
	V_{IH}	**1.2**	—	—		Logic High

ELECTRICAL CHARACTERISTICS

Electrical Characteristics: $V_{IN} = V_{EN} = V_{OUT} + 1V$; $C_{IN} = C_{OUT} = 1\ \mu F$; $I_{OUT} = 100\ \mu A$; $T_A = +25°C$; **Bold** values are valid for –40°C to +125°C unless noted. (**Note 1**).

Parameters	Symbol	Min.	Typ.	Max.	Units	Conditions
Enable Input Current	I_{IL}	—	0.01	**1**	µA	$V_{IL} \leq 0.2V$
	I_{IH}	—	0.01	**1**		$V_{IH} \geq 1.2V$
Turn-On Time	t_{ON}	—	50	**125**	µs	$C_{OUT} = 1\ \mu F$; $I_{OUT} = 150\ mA$

Note 1: Specification for packaged product only.

TEMPERATURE SPECIFICATIONS

Parameters	Symbol	Min.	Typ.	Max.	Units	Conditions
Temperature Ranges						
Maximum Junction Temperature Range	$T_{J(MAX)}$	–40	—	+150	°C	Note 1
Storage Temperature Range	T_S	–65	—	+150	°C	—
Lead Temperature	—	—	—	+260	°C	Soldering, 3 sec.
Junction Temperature	T_J	–40	—	+125	°C	—
Package Thermal Resistances						
Thermal Resistance, TDFN-4	θ_{JA}	—	240	—	°C/W	—
Thermal Resistance, TSOT23-5		—	253	—		
Thermal Resistance, SC-70-5		—	256.5	—		

Note 1: The maximum allowable power dissipation is a function of ambient temperature, the maximum allowable junction temperature and the thermal resistance from junction to air (i.e., T_A, T_J, θ_{JA}). Exceeding the maximum allowable power dissipation will cause the device operating junction temperature to exceed the maximum +125°C rating. Sustained junction temperatures above +125°C can impact the device reliability.

2.0 TYPICAL PERFORMANCE CURVES

Note: The graphs and tables provided following this note are a statistical summary based on a limited number of samples and are provided for informational purposes only. The performance characteristics listed herein are not tested or guaranteed. In some graphs or tables, the data presented may be outside the specified operating range (e.g., outside specified power supply range) and therefore outside the warranted range.

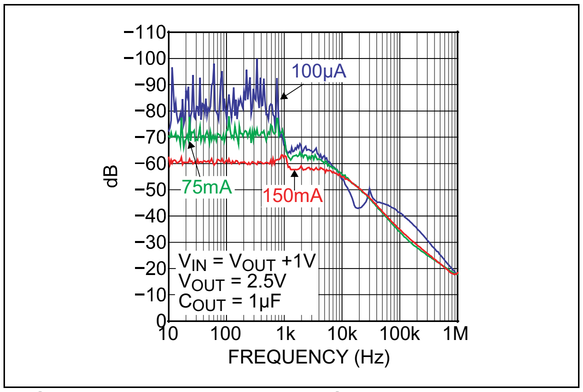


FIGURE 2-1: *Power Supply Rejection Ratio.*

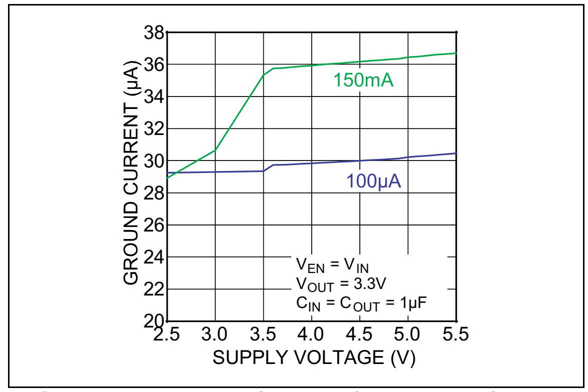


FIGURE 2-4: *Ground Current vs. Supply Voltage.*

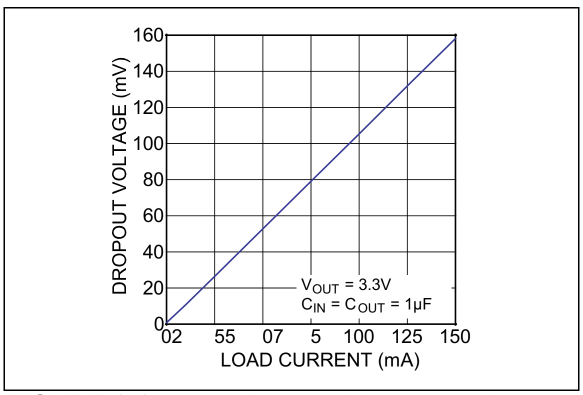


FIGURE 2-2: *Dropout Voltage vs. Load Current.*

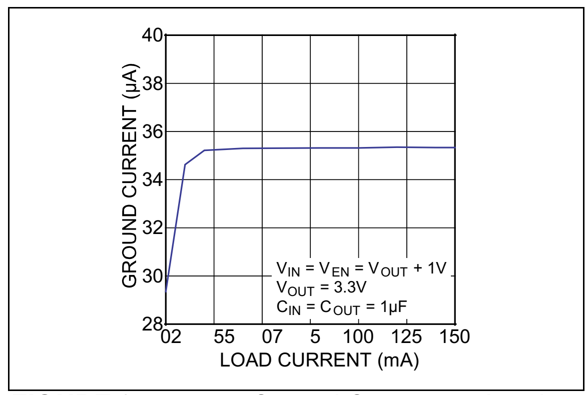


FIGURE 2-5: *Ground Current vs. Load Current.*

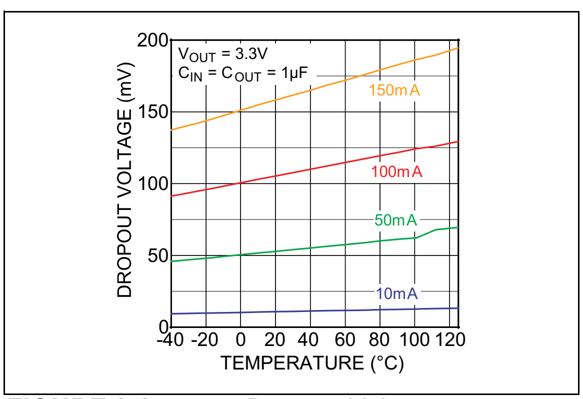


FIGURE 2-3: *Dropout Voltage vs. Temperature.*

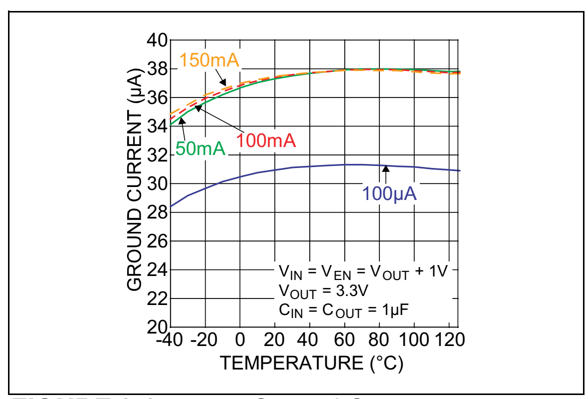


FIGURE 2-6: *Ground Current vs. Temperature.*

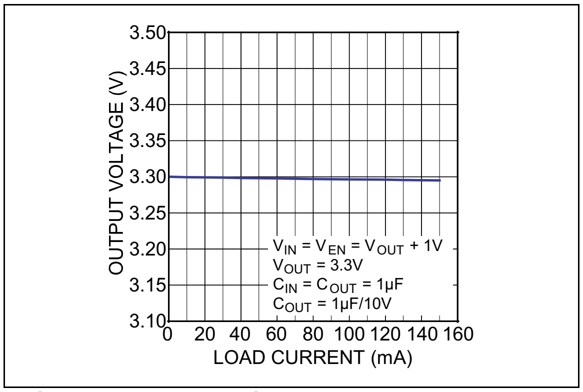


FIGURE 2-7: *Output Voltage vs. Load Current.*

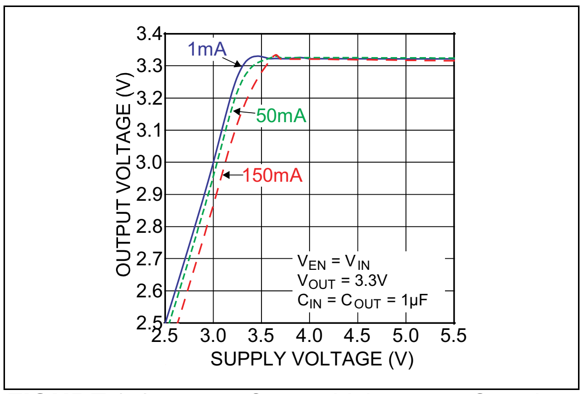


FIGURE 2-8: *Output Voltage vs. Supply Voltage.*

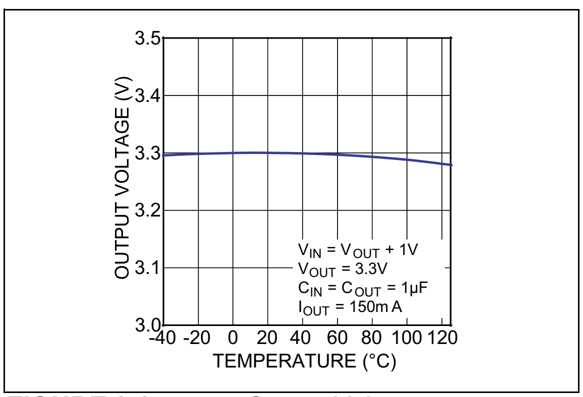


FIGURE 2-9: *Output Voltage vs. Temperature.*

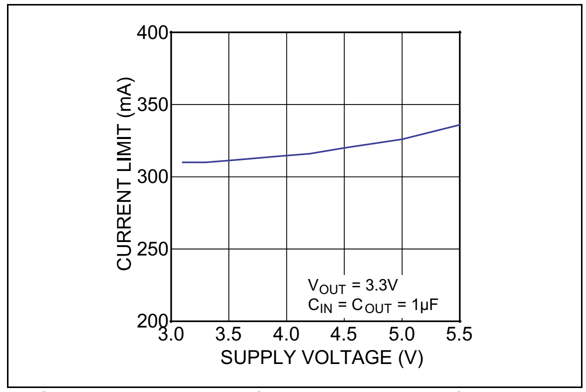


FIGURE 2-10: *Current Limit vs. Supply Voltage.*

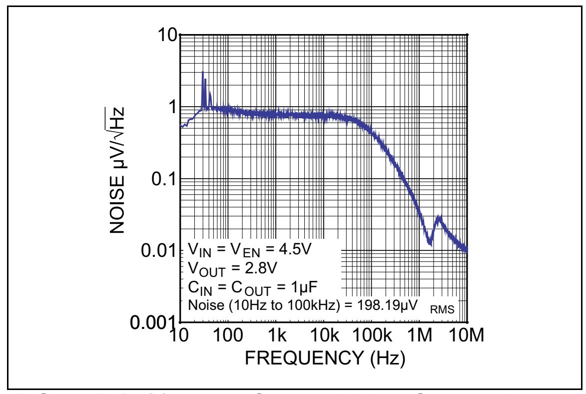


FIGURE 2-11: *Output Noise Spectral Density.*

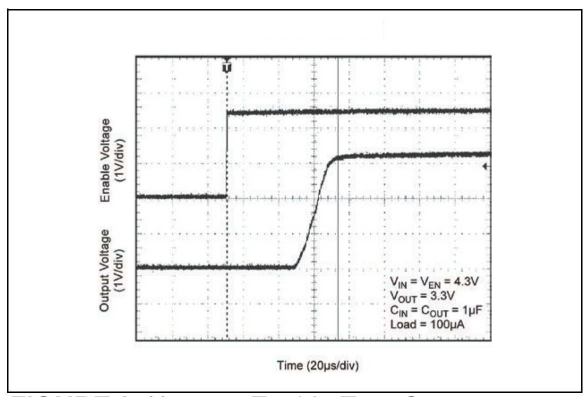


FIGURE 2-12: *Enable Turn-On.*

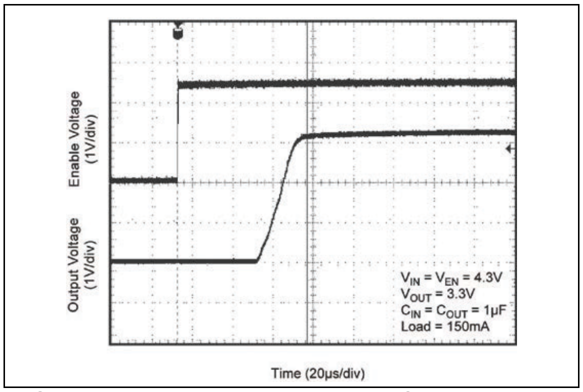


FIGURE 2-13: *Enable Turn-On.*

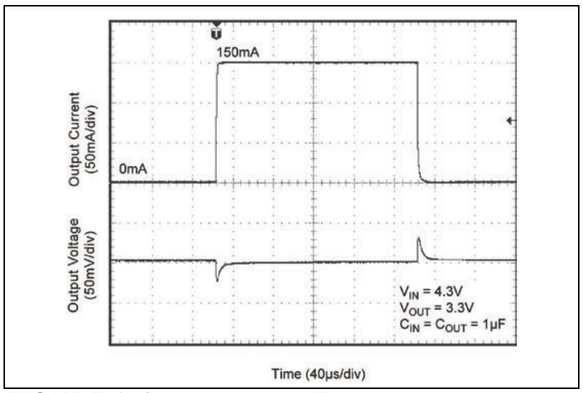


FIGURE 2-14: *Load Transient.*

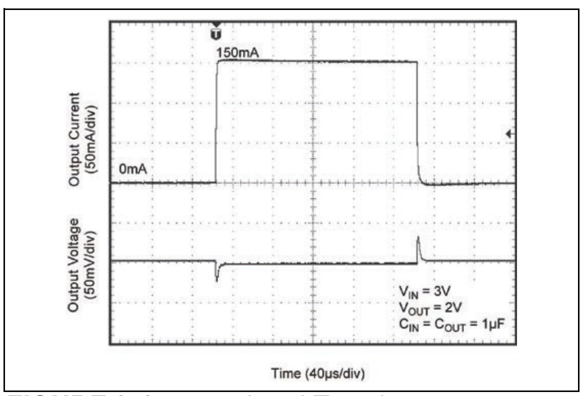


FIGURE 2-15: *Load Transient.*

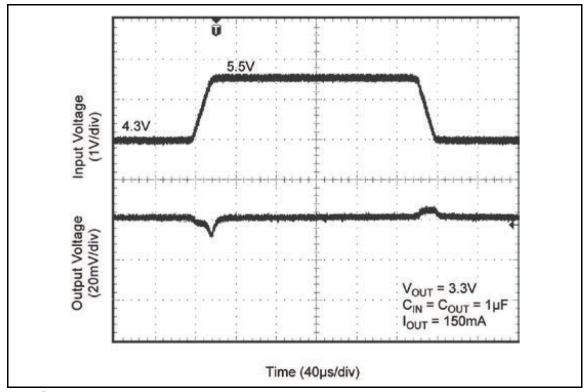


FIGURE 2-16: *Line Transient.*

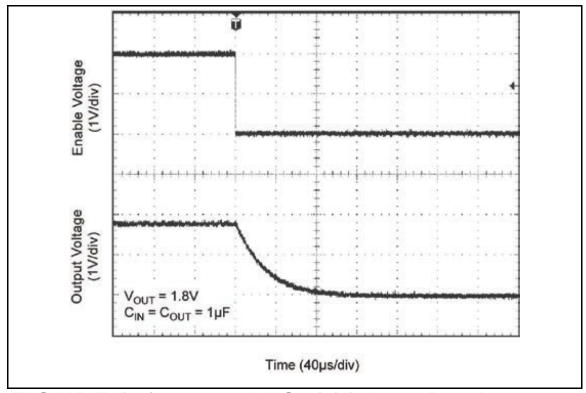


FIGURE 2-17: *MIC5366 Auto Discharge (No Load).*

3.0 PIN DESCRIPTIONS

The descriptions of the pins are listed in Table 3-1.

TABLE 3-1: PIN FUNCTION TABLE

Pin Number	Pin Name TDFN-4	Pin Name TSOT23-5	Pin Name SC70-5	Description
1	VOUT	—	—	Output Voltage.
1	—	VIN	VIN	Supply Input.
2	GND	GND	GND	Ground.
3	EN	EN	EN	Enable Input: Active-high. High = ON; Low = OFF. Do not leave floating.
4	VIN	—	—	Supply Input.
4	—	NC	NC	No Connect. Not internally connected.
5	—	VOUT	VOUT	Output Voltage.
EP	HS Pad	N/A	N/A	Exposed heat sink pad.

4.0 APPLICATION INFORMATION

MIC5365 and MIC5366 are low noise 150 mA LDOs. The MIC5366 includes an auto-discharge circuit that is switched on when the regulator is disabled through the enable pin. The MIC5365/6 regulator is fully protected from damage due to fault conditions, offering linear current limiting and thermal shutdown.

4.1 Input Capacitor

The MIC5365/6 is a high-performance, high-bandwidth device. An input capacitor of 1 µF capacitor is required from the input to ground to provide stability. Low-ESR ceramic capacitors provide optimal performance at a minimum of space. Additional high-frequency capacitors, such as small valued NPO dielectric type capacitors, help filter out high-frequency noise and are good practice in any RF-based circuit. X5R or X7R dielectrics are recommended for the input capacitor. Y5V dielectrics lose most of their capacitance over temperature and are therefore, not recommended.

4.2 Output Capacitor

The MIC5365/6 requires an output capacitor of 1 µF or greater to maintain stability. The design is optimized for use with low-ESR ceramic chip capacitors. High-ESR capacitors may cause high frequency oscillation. The output capacitor can be increased, but performance has been optimized for a 1 µF ceramic output capacitor and does not improve significantly with larger capacitance.

X7R/X5R dielectric-type ceramic capacitors are recommended because of their temperature performance. X7R type capacitors change capacitance by 15% over their operating temperature range and are the most stable type of ceramic capacitors. Z5U and Y5V dielectric capacitors change value by as much as 50% and 60%, respectively, over their operating temperature ranges. To use a ceramic chip capacitor with Y5V dielectric, the value must be much higher than an X7R ceramic capacitor to ensure the same minimum capacitance over the equivalent operating temperature range.

4.3 No-Load Stability

Unlike many other voltage regulators, the MIC5365/6 will remain stable and in regulation with no load. This is especially important in CMOS RAM to keep applications alive.

4.4 Enable/Shutdown

The MIC5365/6 comes with an active-high enable pin that allows the regulator to be disabled. Forcing the enable pin low disables the regulator and sends it into a "zero" off-mode current state. In this state, current consumed by the regulator goes nearly to zero. Forcing the enable pin high enables the output voltage. The active-high enable pin uses CMOS technology and the enable pin cannot be left floating; a floating enable pin may cause an indeterminate state on the output.

4.5 Thermal Considerations

The MIC5365/6 is designed to provide 150 mA of continuous current in a very small package. Maximum ambient operating temperature can be calculated based on the output current and the voltage drop across the part. For example if the input voltage is 3.6V, the output voltage is 2.8V, and the output current = 150 mA. The actual power dissipation of the regulator circuit can be determined using the equation Equation 4-1:

EQUATION 4-1:

$$P_D = (V_{IN} - V_{OUT})I_{OUT} + V_{IN} \times I_{GND}$$

Because this device is CMOS and the ground current is typically <100 µA over the load range, the power dissipation contributed by the ground current is <1% and can be ignored for the calculation in Equation 4-2:

EQUATION 4-2:

$$P_D = (3.6V - 2.8V) \times 150mA$$

$$P_D = 0.120W$$

To determine the maximum ambient operating temperature of the package, use the junction-to-ambient thermal resistance of the device and the following basic formula in Equation 4-3:

EQUATION 4-3:

$$P_{D(MAX)} = \left(\frac{T_{J(MAX)} - T_A}{\theta_{JA}}\right)$$

Where:

$T_{J(MAX)}$ =	125°C
	240°C/W (YMT Package)
θ_{JA} =	256.5°C/W (SC-70-5 Package)
	235°C/W (TSOT23-5 Package)

Substituting P_D for $P_{D(MAX)}$ and solving for the ambient operating temperature will give the maximum operating conditions for the regulator circuit. The junction-to-ambient thermal resistance for the minimum footprint is 250°C/W.

The maximum power dissipation must not be exceeded for proper operation.

For example, when operating the MIC5365-2.8YMT at an input voltage of 3.6V and 150 mA loads at each output with a minimum footprint layout, the maximum ambient operating temperature T_A can be determined in Equation 4-4:

EQUATION 4-4:

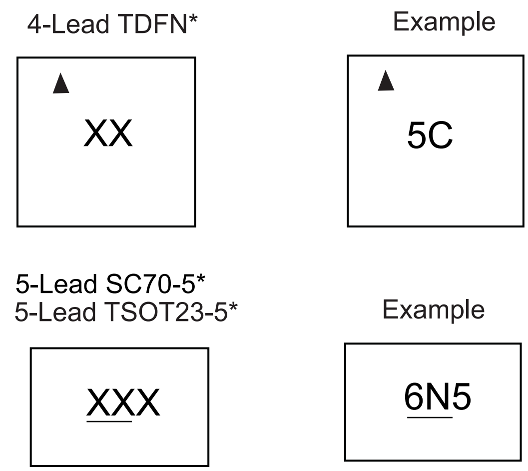
$$0.120W = (125°C - T_A)/(250°C/W)$$

$$T_A = 95°C$$

Therefore, the maximum ambient operating temperature of 95°C is allowed in a 1 mm × 1 mm TDFN package. For a full discussion of heat sinking and thermal effects of voltage regulators, refer to the "Regulator Thermals" section of Designing with Low-Dropout Voltage Regulators handbook.

5.0 PACKAGING INFORMATION

5.1 Package Marking Information



Legend:

XX...X	Product code or customer-specific information
Y	Year code (last digit of calendar year)
YY	Year code (last 2 digits of calendar year)
WW	Week code (week of January 1 is week ‘01’)
NNN	Alphanumeric traceability code
(e3)	Pb-free JEDEC® designator for Matte Tin (Sn)
*	This package is Pb-free. The Pb-free JEDEC designator ((e3)) can be found on the outer packaging for this package.

●, ▲, ▼ Pin one index is identified by a dot, delta up, or delta down (triangle mark).

Note: In the event the full Microchip part number cannot be marked on one line, it will be carried over to the next line, thus limiting the number of available characters for customer-specific information. Package may or may not include the corporate logo.

Underbar (_) and/or Overbar (‾) symbol may not be to scale.

TABLE 5-1: PACKAGE MARKING CODES FOR MIC5363/65

Part Number	Output Voltage	Marking Codes
MIC5365-1.0YMT	1.0V	5C
MIC5365-1.2YMT	1.2V	54
MIC5365-1.3YMT	1.3V	55
MIC5365-1.5YMT	1.5V	5F
MIC5365-1.8YMT	1.8V	5G
MIC5365-2.0YMT	2.0V	5H
MIC5365-2.5YMT	2.5V	5J
MIC5365-2.6YMT	2.6V	5K
MIC5365-2.7YMT	2.7V	5L
MIC5365-2.8YMT	2.8V	5M
MIC5365-2.85YMT	2.85V	5N
MIC5365-2.9YMT	2.9V	5O
MIC5365-3.0YMT	3.0V	5P
MIC5365-3.3YMT	3.3V	5S
MIC5365-1.0YC5	1.0V	65C
MIC5365-1.2YC5	1.2V	654
MIC5365-1.3YC5	1.3V	655
MIC5365-1.5YC5	1.5V	65F
MIC5365-1.8YC5	1.8V	65G
MIC5365-2.0YC5	2.0V	65H
MIC5365-2.5YC5	2.5V	65J
MIC5365-2.6YC5	2.6V	65K
MIC5365-2.7YC5	2.7V	65L
MIC5365-2.8YC5	2.8V	65M
MIC5365-2.85YC5	2.85V	65N
MIC5365-2.9YC5	2.9V	65O
MIC5365-3.0YC5	3.0V	65P
MIC5365-3.3YC5	3.3V	65S
MIC5365-1.2YD5	1.2V	645
MIC5365-1.8YD5	1.8V	6G5
MIC5365-2.8YD5	2.8V	6M5
MIC5365-2.85YD5	2.85V	6N5
MIC5365-3.3YD5	3.3V	6S5
MIC5366-1.0YMT	1.0V	6C
MIC5366-1.2YMT	1.2V	64
MIC5366-1.3YMT	1.3V	65
MIC5366-1.5YMT	1.5V	6F
MIC5366-1.8YMT	1.8V	6G
MIC5366-2.0YMT	2.0V	6H
MIC5366-2.5YMT	2.5V	6J
MIC5366-2.6YMT	2.6V	6K
MIC5366-2.7YMT	2.7V	6L
MIC5366-2.8YMT	2.8V	6M

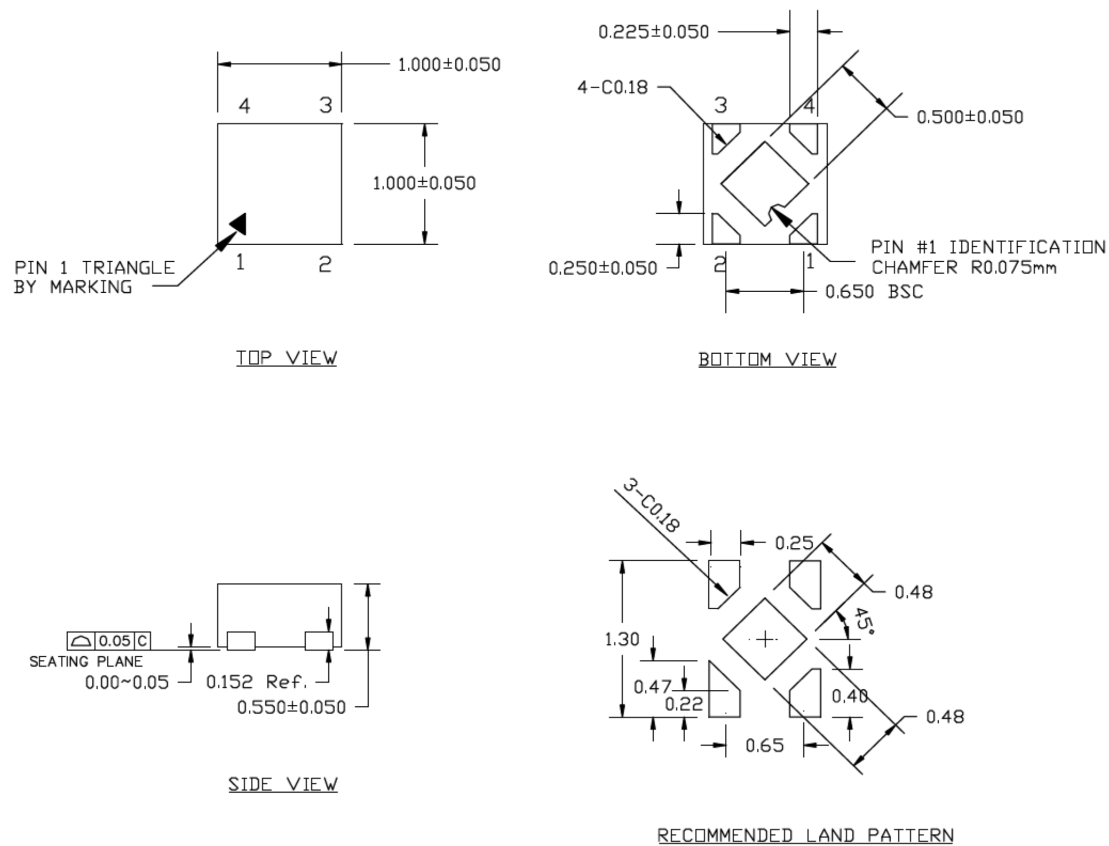
TABLE 5-1: PACKAGE MARKING CODES FOR MIC5363/65

Part Number	Output Voltage	Marking Codes
MIC5366-2.85YMT	2.85V	6N
MIC5366-2.9YMT	2.9V	6O
MIC5366-3.0YMT	3.0V	6P
MIC5366-3.3YMT	3.3V	6S
MIC5366-1.0YC5	1.0V	66C
MIC5366-1.2YC5	1.2V	664
MIC5366-1.3YC5	1.3V	665
MIC5366-1.5YC5	1.5V	66F
MIC5366-1.8YC5	1.8V	66G
MIC5366-2.0YC5	2.0V	66H
MIC5366-2.5YC5	2.5V	66J
MIC5366-2.6YC5	2.6V	66K
MIC5366-2.7YC5	2.7V	66L
MIC5366-2.8YC5	2.8V	66M
MIC5366-2.85YC5	2.85V	66N
MIC5366-2.9YC5	2.9V	66O
MIC5366-3.0YC5	3.0V	66P
MIC5366-3.3YC5	3.3V	66S

4-Lead TDFN Package Outline and Recommended Land Pattern

TITLE
4 LEAD TDFN 1.0x1.0mm PACKAGE OUTLINE & RECOMMENDED LAND PATTERN

DRAWING #	TDFN1010-4LD-PL-2	**UNIT**	MM



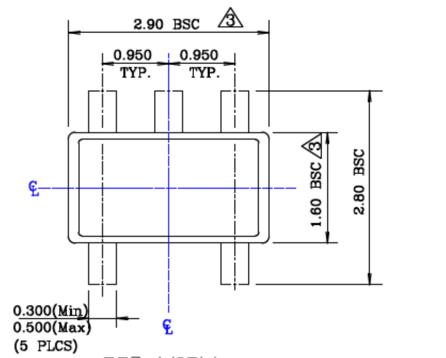
NOTE:
1. MAX PACKAGE WARPAGE IS 0.05 MM
2. MAX ALLOWABLE BURR IS 0.076MM IN ALL DIRECTIONS
3. PIN #1 IS ON TOP WILL BE LASER MARKED
4. UNSPECIFIED TOLERANCE IS +/- 0.05 MM

Note: For the most current package drawings, please see the Microchip Packaging Specification located at http://www.microchip.com/packaging.

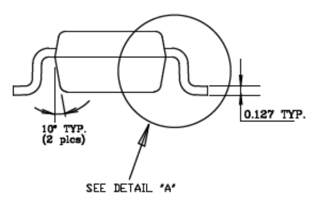
5-Lead TSOT23 Package Outline and Recommended Land Pattern

TITLE
5 LEAD TSOT PACKAGE OUTLINE & RECOMMENDED LAND PATTERN

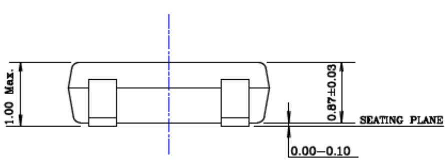
DRAWING #	TSOT-5LD-PL-1	**UNIT**	MM



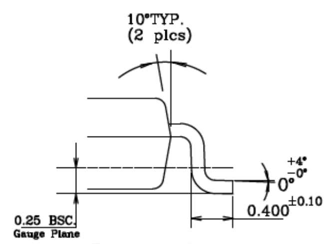
TOP VIEW
NOTES : 3, 6



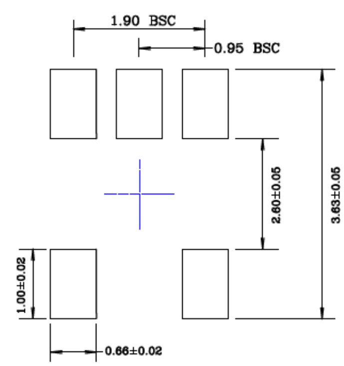
END VIEW
NOTES : 2, 4, 6



TOP VIEW
NOTES : 4, 6



DETAIL "A"



RECOMMENDED LAND PATTERN

NOTE:

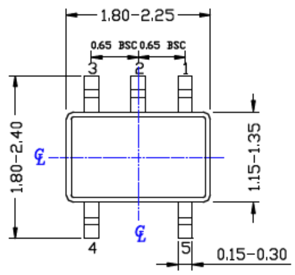
1. Dimensions and tolerances are as per ANSI Y14.5M, 1994.
2. Die is facing up for mold. Die is facing down for trim/form, ie. reverse trim/form.
3. (△) Dimensions are exclusive of mold flash and gate burr.
4. The footlength measuring is based on the gauge plane method.
5. All specification comply to Jedec Spec MO193 Issue C.
6. All dimensions are in millimeters.

Note: For the most current package drawings, please see the Microchip Packaging Specification located at http://www.microchip.com/packaging.

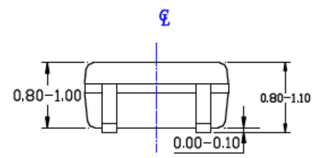
5-Lead SC-70 Package Outline and Recommended Land Pattern

TITLE
5 LEAD SC70 PACKAGE OUTLINE & RECOMMENDED LAND PATTERN

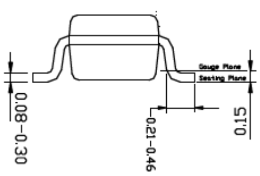
DRAWING #	SC70-5LD-PL-2	**UNIT**	MM



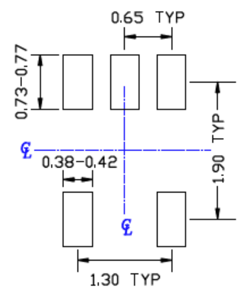
TOP VIEW



SIDE VIEW



END VIEW



RECOMMENDED LAND PATTERN

NOTE:
1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. DIMENSIONS ARE INCLUSIVE OF PLATING.
3. DIMENSIONS ARE EXCLUSIVE OF MOLD FLASH & METAL BURR.

Note: For the most current package drawings, please see the Microchip Packaging Specification located at http://www.microchip.com/packaging.

APPENDIX A: REVISION HISTORY

Revision A (October 2021)

- Converted Micrel document MIC5365/6 to Microchip data sheet DS20006605A.
- Minor text changes throughout.
- Evaluation Board Schematic and BOM sections from original data sheet moved to the part's Evaluation Board User's Guide.

NOTES:

PRODUCT IDENTIFICATION SYSTEM

To order or obtain information, e.g., on pricing or delivery, contact your local Microchip representative or sales office.

PART NO.	-XXX	X	XX	-XX
Device	Voltage Option	Junction Temperature Range	Package	Media Type

Device:	MIC5365: High-Performance Single 150 mA LDO MIC5366: High-Performance Single 150 mA LDO with Output Discharge Circuit	
Voltage Options	5C = 1.0V (MIC5365) 54 = 1.2V (MIC5365) 55 = 1.3V (MIC5365) 5F = 1.5V (MIC5365) 5G = 1.8V (MIC5365) 5H = 2.0V (MIC5365) 5J = 2.5V (MIC5365) 5K = 2.6V (MIC5365) 5L = 2.7V (MIC5365) 5M = 2.8V (MIC5365) 5N = 2.85V (MIC5365) 5O = 2.9V (MIC5365) 5P = 3.0V (MIC5365) 5S = 3.3V (MIC5365) 65C = 1.0V (MIC5365) 654 = 1.2V (MIC5365) 655 = 1.3V (MIC5365) 65F = 1.5V (MIC5365) 65G = 1.8V (MIC5365) 65H = 2.0V (MIC5365) 65J = 2.5V (MIC5365) 65K = 2.6V (MIC5365) 65L = 2.7V (MIC5365) 65M = 2.8V (MIC5365) 65N = 2.85V (MIC5365) 65O = 2.9V (MIC5365) 65P = 3.0V (MIC5365) 65S = 3.3V (MIC5365) 645 = 1.2V (MIC5365) 6G5 = 1.8V (MIC5365) 6M5 = 2.8V (MIC5365) 6N5 = 2.85V (MIC5365) 6S5 = 3.3V (MIC5365)	6C = 1.0V (MIC5366) 64 = 1.2V (MIC5366) 65 = 1.3V (MIC5366) 6F = 1.5V (MIC5366) 6G = 1.8V (MIC5366) 6H = 2.0V (MIC5366) 6J = 2.5V (MIC5366) 6K = 2.6V (MIC5366) 6L = 2.7V (MIC5366) 6M = 2.8V (MIC5366) 6N = 2.85V (MIC5366) 6O = 2.9V (MIC5366) 6P = 3.0V (MIC5366) 6Q = 3.0V (MIC5366) 6S = 3.3V (MIC5366) 66C = 1.0V (MIC5366) 664 = 1.2V (MIC5366) 665 = 1.3V (MIC5366) 66F = 1.5V (MIC5366) 66G = 1.8V (MIC5366) 66H = 2.0V (MIC5366) 66J = 2.5V (MIC5366) 66K = 2.6V (MIC5366) 66L = 2.7V (MIC5366) 66M = 2.8V (MIC5366) 66N = 2.85V (MIC5366) 66O = 2.9V (MIC5366) 66P = 3.0V (MIC5366) 66S = 3.3V (MIC5366)
Junction Temperature Range:	Y = –40°C to +125°C (RoHS Compliant)	
Package:	MT = 4-Lead 1 mm x 1 mm Thin DFN Package (Pb-Free) (MIC5365/6) C5 = 5-Lead SC-70 Package (Pb-Free) (MIC5365/6) D5 = 5-Lead TSOT-23 Package (Pb-Free) (MIC5365) Only	
Media Type:	T5 = 500/Reel TR = 5,000/Reel TZ = 10,000/Reel	

Examples:

a) MIC5365-54YD5-T5	High-Performance Single 150 mA LDO, 1.2V, –40°C to +125°C, 5-Lead TSOT23-5 Package, 500/Reel
b) MIC5365-5MYC5-TR	High-Performance Single 150 mA LDO, 2.8V, –40°C to +125°C, 5-Lead SC-70-5 Package, 5,000/Reel
c) MIC5365-65NYMT-TZ	High-Performance Single 150 mA LDO, 2.85V, –40°C to +125°C, 4-Lead TDFN Package, 10,000/Reel
e) MIC5366-66LYC5-TR	High-Performance Single 150 mA LDO, 2.7V, –40°C to +125°C, 5-Lead SC-70-5 Package, 5,000/Reel
f) MIC5366-66OYMT-TZ	High-Performance Single 150 mA LDO, 2.9V, –40°C to +125°C, 4-Lead TDFN Package, 10,000/Reel

Note 1: Tape and Reel identifier only appears in the catalog part number description. This identifier is used for ordering purposes and is not printed on the device package. Check with your Microchip Sales Office for package availability with the Tape and Reel option.

NOTES:

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