FAIRCHILD™

Is Now Part of

ON Semiconductor®

To learn more about ON Semiconductor, please visit our website at
www.onsemi.com

Please note: As part of the Fairchild Semiconductor integration, some of the Fairchild orderable part numbers will need to change in order to meet ON Semiconductor's system requirements. Since the ON Semiconductor product management systems do not have the ability to manage part nomenclature that utilizes an underscore (_), the underscore (_) in the Fairchild part numbers will be changed to a dash (-). This document may contain device numbers with an underscore (_). Please check the ON Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.onsemi.com. Please email any questions regarding the system integration to Fairchild_questions@onsemi.com.

FAIRCHILD

SEMICONDUCTOR®

July 2013

FAN5622 / FAN5624 / FAN5626
Linear LED Drivers with Single-Wire Digital Interface

Features

- Family of Three Linear Current-Sink LED Drivers that Support 2, 4, or 6 LED Outputs
- Current Sink Driver for Each LED Output:
  - 30 mA Maximum Output Current
  - 50 mV Drop-out at 15 mA I_{OUT}
  - Better than 3% Matching between Channels
  - External R_{SET}
- Single-Wire Digital Control Interface for Easy Programming
  - 32 Linear Steps of Dimming Control
- Less than 1 µA Shutdown Current
- Short-Circuit, Under-Voltage, and Thermal Protection
- Wide Input Voltage Range: 2.7 to 5.5 V
- Small Form-Factor Packages:
  - FAN5622: 6-Pin Super SOT23
  - FAN5624: 10-Lead 1.4x1.8x0.55 mm UMLP
  - FAN5626: 10-Lead 1.6x2.1x0.55 mm MicroPak™ MLP

Applications

- Mobile Handsets
- Mobile Internet Devices
- PMP and MP3 Players
- LCD Modules

Description

The FAN5622, FAN5624, and FAN5626 are two-, four-, and six-channel current-sink linear LED drivers used to backlight the main LCD displays or keypads in mobile electronics, such as cellular phone handsets.

A very low dropout of 50 mV allows driving LEDs without any inductors or switch capacitors. The brightness levels of the LED outputs are programmed through single-wire digital control interface. The user can program 32 linear dimming steps and turn on and off the LEDs through this interface by applying digital pulses.

The FAN562x family of linear LED drivers provides high efficiency due to the low drop-out voltage of the LED driver. Good matching between different channels of LED output is provided across the entire 32 dimming steps. These LED drivers also integrate short circuit, under-voltage, and thermal protection to ensure for a more robust solution.

The FAN5622, FAN5624, and FAN5626 are available in very small form-factor packages: 6-pin Super SOT23, 10-lead UMLP, and 10-lead MicroPak™ MLP, respectively.
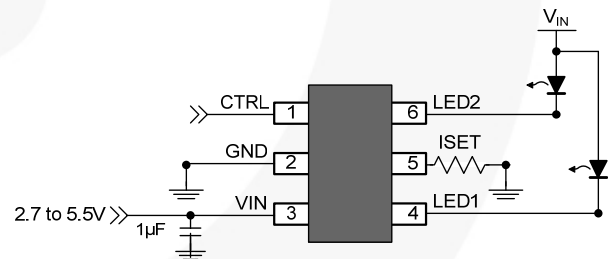
Figure 1. Typical Application of FAN5622

Ordering Information

Part Number	# of Channels	Temperature Range	Package	Packing
FAN5622SX	2	-40 to 85°C	6-Lead, SUPERSOT6, JEDEC MO-193, 1.6 mm Wide	Tape and Reel
FAN5624UMPX	4	-40 to 85°C	10-Lead, Ultrathin Molded Leadless Package (UMLP)	Tape and Reel
FAN5626LX	6	-40 to 85°C	10-Lead ,Micropak ,JEDEC MO255, 1.6 X 2.1 mm	Tape and Reel

Applications Diagrams
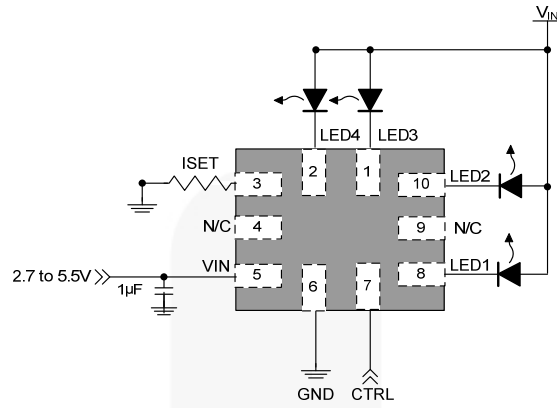
Figure 2. FAN5624 Typical Application for 4 LEDs
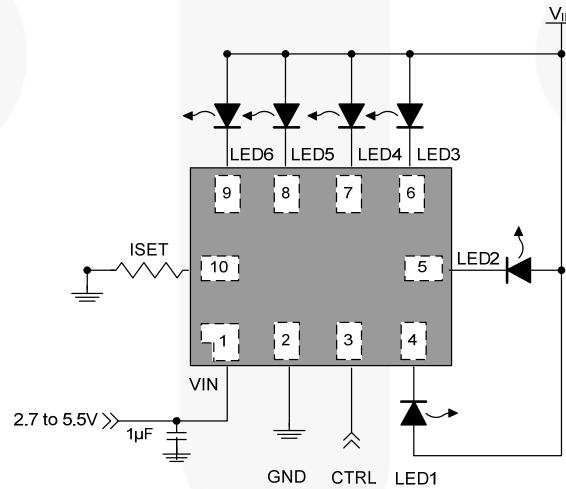
Figure 3. FAN5626 Typical Application for 6 LEDs

Block Diagram
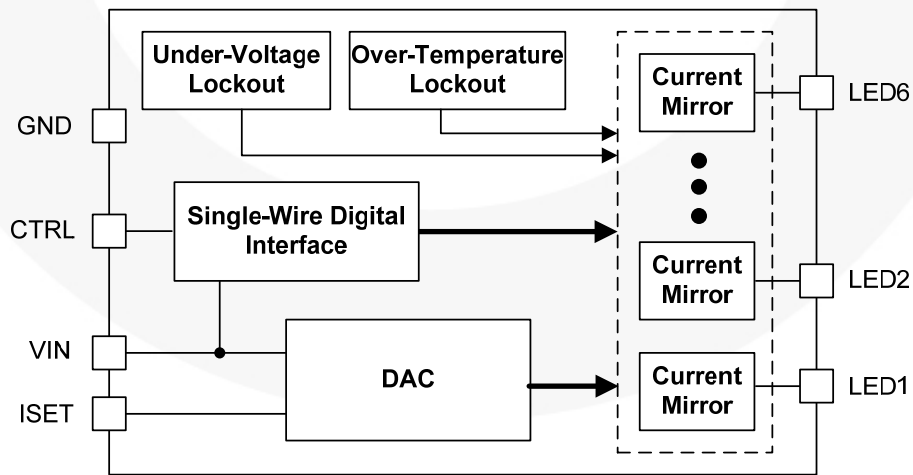
Figure 4. Block Diagram

Pin Configuration

CTRL 1   6 LED1
GND 2   5 ISET
VIN 3   4 LED2
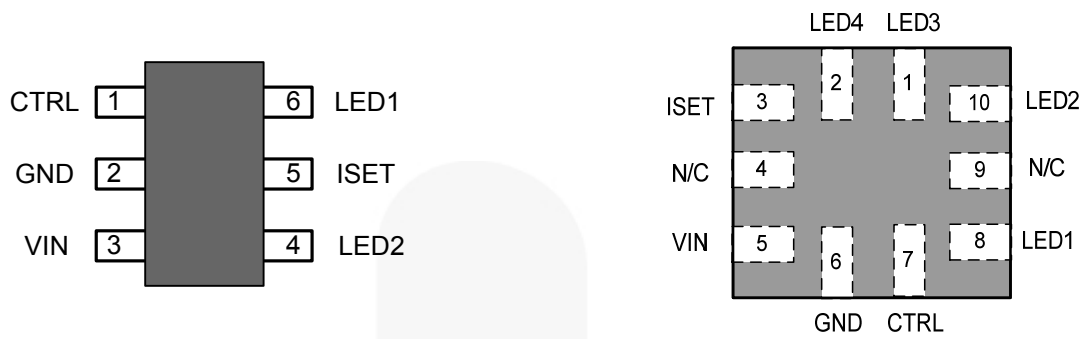
Figure 5. FAN5622: 6-Pin SSOT23, Top View

LED4 LED3
ISET 3   2   1   10 LED2
N/C 4   9 N/C
VIN 5   6   7   8 LED1
GND CTRL

Figure 6. FAN5624: 10-Lead UMLP, Top View

LED6 LED5 LED4 LED3
9   8   7   6
ISET 10   5 LED2
1   2   3   4
VIN GND CTRL LED1
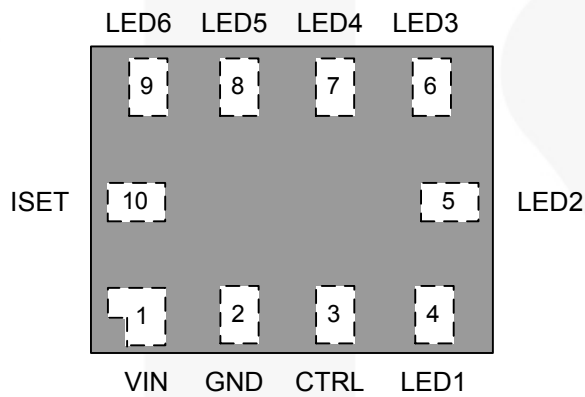
Figure 7. FAN5626: 10-Lead MicroPak™ MLP, Top View

Pin Definitions

Pin #			Name	Description
FAN5622 SSOT23-6	**FAN5624 UMLP10**	**FAN5626 MicroPak MLP10**		
3	5	1	VIN	**Input Voltage**. Connect to 2.7-5.5 V_{DC} input power source.
2	6	2	GND	**Ground**
5	3	10	ISET	**LED Current Setting**. Full-scale LED current is set by tying this pin through a resistor (R_{SET}) to GND.
1	7	3	CTRL	**Control** pin. Program dimming levels by driving pin with digital pulses. This pin cannot be left floating.
6	8	4	LED1	**LED Cathode #1**. LED current sink output.
4	10	5	LED2	**LED Cathode #2**. LED current sink output.
	1	6	LED3	**LED Cathode #3**. LED current sink output.
	2	7	LED4	**LED Cathode #4**. LED current sink output.
		8	LED5	**LED Cathode #5**. LED current sink output.
		9	LED6	**LED Cathode #6**. LED current sink output.
	4, 9		N/C	**No Connect**

Absolute Maximum Ratings

Stresses exceeding the absolute maximum ratings may damage the device. The device may not function or be operable above the recommended operating conditions and stressing the parts to these levels is not recommended. In addition, extended exposure to stresses above the recommended operating conditions may affect device reliability. The absolute maximum ratings are stress ratings only.

Symbol	Parameter		Min.	Max.	Unit
V_{CC}	VIN Pin		-0.3	6.0	V
	Other Pins[1]		-0.3	V_{IN} + 0.3	V
ESD	Electrostatic Discharge Protection Level	Human Body Model per JESD22-A114	3.0		kV
		Charged Device Model per JESD22-C101	1.5		kV
T_J	Junction Temperature		–40	+150	°C
T_{STG}	Storage Temperature		–65	+150	°C
T_L	Lead Soldering Temperature, 10 Seconds			+260	°C

Note:

1. Lesser of 6.0 V or V_{IN}+0.3 V.

Recommended Operating Conditions

The Recommended Operating Conditions table defines the conditions for actual device operation. Recommended operating conditions are specified to ensure optimal performance to the datasheet specifications. Fairchild does not recommend exceeding them or designing to absolute maximum ratings.

Symbol	Parameter	Min.	Max.	Unit
V_{IN}	Power Supply Voltage Range	2.7	5.5	V
T_A	Operating Ambient Temperature Range	-40	+85	°C
T_J	Operating Junction Temperature Range	-40	+125	°C
$I_{LED(FS)}$	Full-Scale LED Current	5	30	mA

Thermal Properties

Junction-to-ambient thermal resistance is a function of application and board layout. This data is measured with boards in accordance to JEDEC standard JESD51. Special attention must be paid not to exceed junction temperature $T_{J(max)}$ at a given ambient temperature T_A.

Symbol	Parameter	Typical	Unit
θ_{JA}	Junction-to-Ambient Thermal Resistance, SSOT23-6 Package	235	°C/W
	Junction-to-Ambient Thermal Resistance, UMLP10 Package[2]	287	°C/W
	Junction-to-Ambient Thermal Resistance, MicroPak™ MLP10 package[3]	220	°C/W

Notes:

2. Recommended not to exceed 132 mW of maximum power dissipation.
3. Recommended not to exceed 198 mW of maximum power dissipation.

Electrical Specifications

V_{IN} = 2.7 V to 5.5 V, R_{SET} = 19.10 kΩ, T_A = -40°C to +85°C, V_f = 2.5 V to [3.5 V or V_{IN} – 0.1 V], whichever is smaller. Typical values are at T_A = 25°C, V_{IN} = 3.6 V, and V_f = 3.2 V.

Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
Power Supplies						
I_{SD}	Shutdown Supply Current	V_{IN} = 3.6 V, CTRL = 0		0.3	1.0	µA
I_{IN}	Operating Supply Current	FAN5622: V_{IN} = 3.6 V, I_{LED} = 0 mA		0.4	0.8	mA
		FAN5624: V_{IN} = 3.6 V, I_{LED} = 0 mA		0.6	1.0	mA
		FAN5626: V_{IN} = 3.6 V, I_{LED} = 0 mA		0.8	1.2	mA
I_{IH}	Control Pin Input Current	CTRL = 1.8 V		1	250	nA
V_{UVLO}	Under-Voltage Lockout Threshold	V_{IN} Rising		2.50	2.70	V
		V_{IN} Falling	2.10	2.30	2.50	V
Regulation						
$I_{FS\_LEDx (MAX)}$	Full-Scale LED Output Current	I_{LEDx} = 30 mA; x = 1 to 6	5		30	mA
I_{LED}	Absolute Current Accuracy	V_{IN}=2.85 V – 4.5 V; V_{CATH} =0.15 to (1.2 V or V_{IN}=2.55 V, Whichever is Smaller); Full-Scale Current 5-30 mA, T_A = 25°C	-10		+10	%
$I_{LED\ MATCH}$	LED Current Matching[4]	I_{LEDx} = 15 mA; V_LEDx=0.4 V, T_A = 25°C	-3		+3	%
V_{ISET}	I_{SET} Drive Voltage	9.53 kΩ ≤ R_{SET} ≤ 56.2 kΩ		1.20		V
I_{RATIO}	Current Mirror Ratio from ISET Pin	9.53 kΩ ≤ R_{SET} ≤ 56.2 kΩ		240		
ΔI_{OUT_LOAD}	I_{OUT} Load Regulation	V_{IN} = 3.6 V, I_{LEDx} = 15 mA, LED V_F = 2.7 to 3.5 V,	-3		+3	%
ΔI_{OUT_LINE}	I_{OUT} Line Regulation	V_{IN} = 2.7 to 4.8 V, I_{LEDx} = 15 mA, V_{CATH} = 0.5 V	-4		+4	%
$V_{DROPOUT}$	Dropout Voltage	V_{IN}=3.6 V; I_{LED} = 15 mA, -10% I_{LED} Drop		50		mV
		V_{IN}=3.6 V; I_{LED} = 30 mA, -10% I_{LED} Drop		60		
TSD	Thermal Shutdown	Rising Temperature at Junction		150		°C
		Hysteresis		20		
Logic Input (CTRL)						
V_{IH}	HIGH-Level Input Voltage		1.2			V
V_{IL}	LOW-Level Input Voltage				0.4	V
T_{LO}	CTRL LOW Time for Dimming	V_{IN} = 3.6 V; *See Figure 17*	0.5		300	µs
T_{HI}	Time Delay between Steps	V_{IN} = 3.6 V; *See Figure 17*	0.5			µs
T_{ON}	CTRL HIGH to Turn-On Delay	V_{IN} = 3.6 V; *See Figure 17*		250		µs
T_{SD}	CTRL LOW, Shutdown Pulse Width	V_{IN} = 3.6 V; from Falling Edge of CTRL	1			ms

Note:

4. For the two, four, and six LED current sinks of FAN5622, FAN5624, and FAN5626 respectively; the following are determined: the maximum sink current of the two, four, and six LED outputs (MAX); the minimum sink current of the two, four, and six outputs (MIN); and the average sink current (AVG). For all of the LED outputs, two matching numbers are calculated: (MAX-AVG)/ AVG and (AVG-MIN)/AVG. The largest number of the two (worst case) is considered the matching figure for the part. The matching figure for a given part is considered to be the highest matching figure of all LED outputs. The typical specification provided is the most likely norm of the matching figure for all parts.

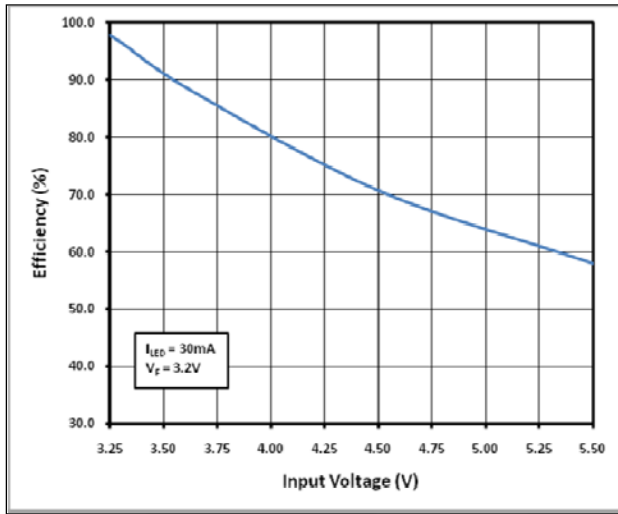# Typical Performance Characteristics

Figure 8. Efficiency vs. Input Voltage where LED V_F=3.2 V
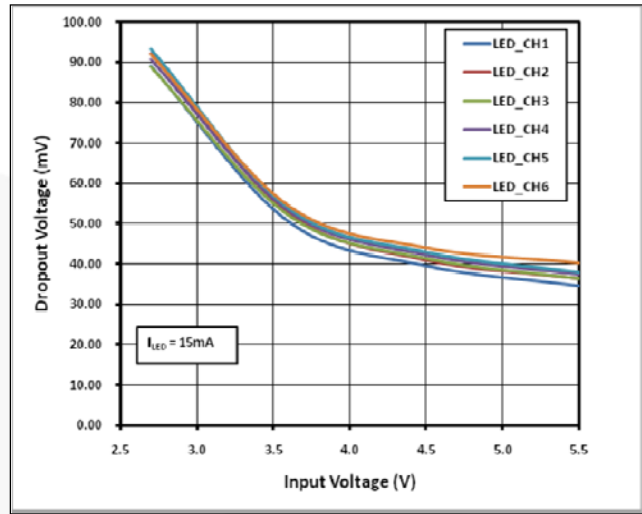
Figure 9. Dropout Voltage vs. Input Voltage

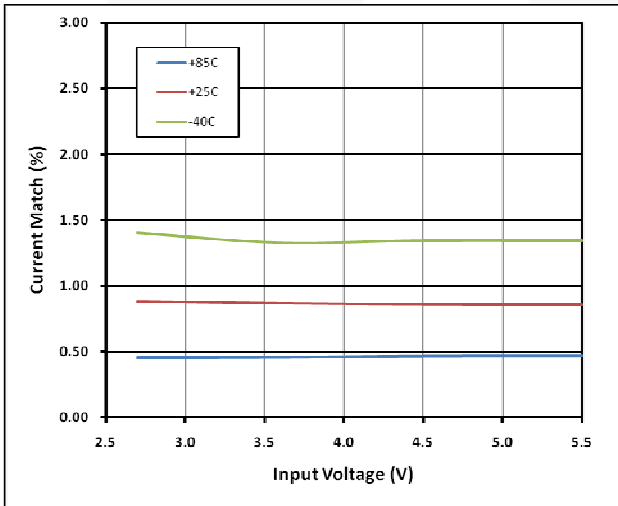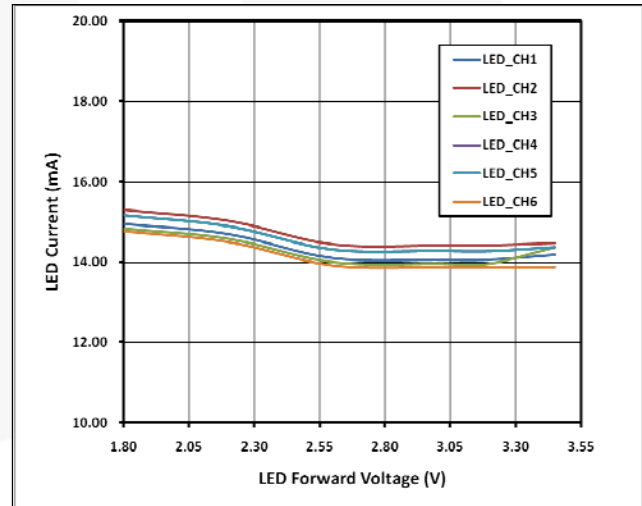**Figure 10. Current Match of Channels vs. Input Voltage**

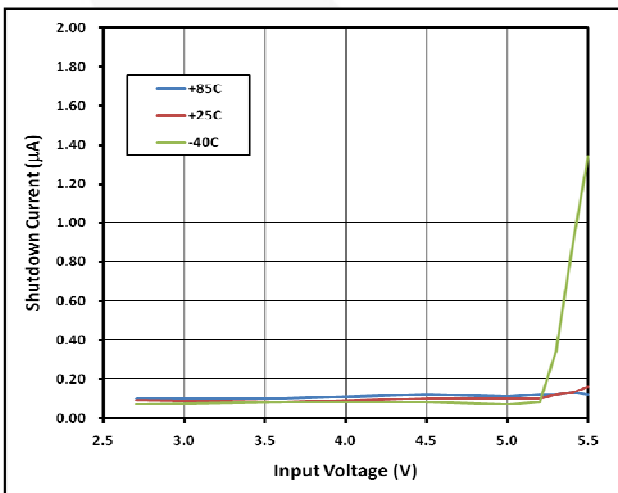**Figure 11. Load Regulation at 15 mA/Output**

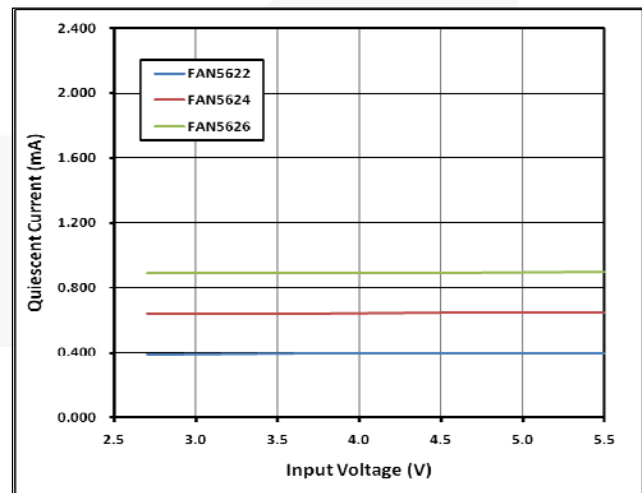**Figure 12. Shutdown Current vs. Input Voltage**

Figure 13. Quiescent Current vs. Input Voltage
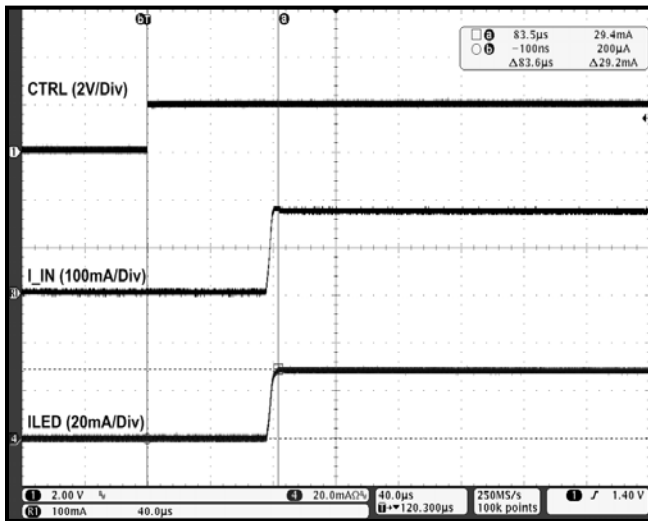
Typical Performance Characteristics
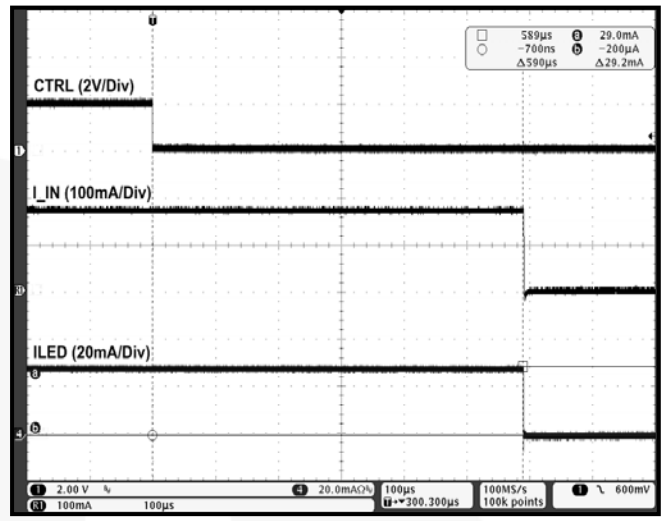

Figure 14. Startup Waveform for FAN5626

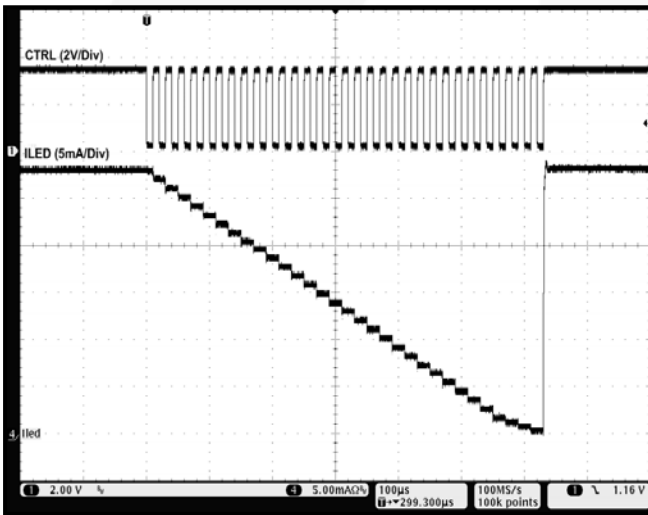**Figure 15. Shutdown Waveform for FAN5626**

Figure 16. Dimming Operation

www.fairchildsemi.com

Circuit Description

The FAN5622, FAN5624, and FAN5626 are a family of current-sink linear LED driver ICs able to drive two, four, and six LEDs respectively. These three devices are powered directly from 2.7 V to 5.5 V supply and all the channels are controlled via the integrated current sinks from the external power source. Designed with a very low drop-out voltage, the FAN562x products can operate close to the input supply voltage without the need for additional inductive boost or capacitive switching circuitry.

All three devices require only two additional discrete passive components: a single 1 µF input ceramic capacitor and a resistor (R_{SET}) to set the maximum current for the LEDs. Each current-sink output provides constant current and can drive the LEDs up to 30 mA. Fairchild Semiconductor's TinyWire™ single-wire digital interface enables these LED drivers to program the brightness level of the LEDs in 32 linear steps.

Setting Maximum Current

The maximum LED current of the FAN5622, FAN5624, and FAN5626 is programmed by an external resistor called RSET. The maximum full-scale LED current for all three LED drivers is 30 mA and it can go as low as 5 mA. The FAN562x products also operate below 5 mA full-scale LED current by using a larger R_{SET} value. However, the LED channel accuracy and matching specifications are guaranteed. Table 1 shows the RSET resistor values for several full-scale current levels.

Table 1. Maximum LED Current Settings by Resistor

I_{LED} (mA)	R_{SET} (kΩ)
5	56.20
10	28.70
15	19.10
20	14.30
25	11.50
30	9.53

Digital Interface & Dimming Control

The FAN5622, FAN5624, and FAN5626 implement a simple single-wire digital interface to program the LED brightness to one of thirty two (32) levels spaced in linear steps. To maintain the brightness of the LEDs at a specific dimming level, the digital pulse signal to the CTRL pin should be held HIGH for that last pulse. It is held HIGH for as long as desired to keep the LEDs illuminated at that specific brightness level.

Table 2 outlines the dimming levels while Figure 17 shows how to change the dimming levels.

Table 2. Brightness Control Levels (R_{SET} = 19.10 kΩ)

Dimming Level	Current Level	I_{LED} (mA)
1	1.67%	0.25
2	3.33%	0.50
3	5.00%	0.75
4	6.67%	1.00
5	10.00%	1.50
6	13.33%	2.00
7	16.67%	2.50
8	20.00%	3.00
9	23.33%	3.50
10	26.67%	4.00
11	30.00%	4.50
12	33.33%	5.00
13	36.67%	5.50
14	40.00%	6.00
15	43.33%	6.50
16	46.67%	7.00
17	50.00%	7.50
18	53.33%	8.00
19	56.67%	8.50
20	60.00%	9.00
21	63.33%	9.50
22	66.67%	10.00
23	70.00%	10.50
24	73.33%	11.00
25	76.67%	11.50
26	80.00%	12.00
27	83.33%	12.50
28	86.67%	13.00
29	90.00%	13.50
30	93.33%	14.00
31	96.67%	14.50
32	100.00%	15.00

Digital Dimming Control
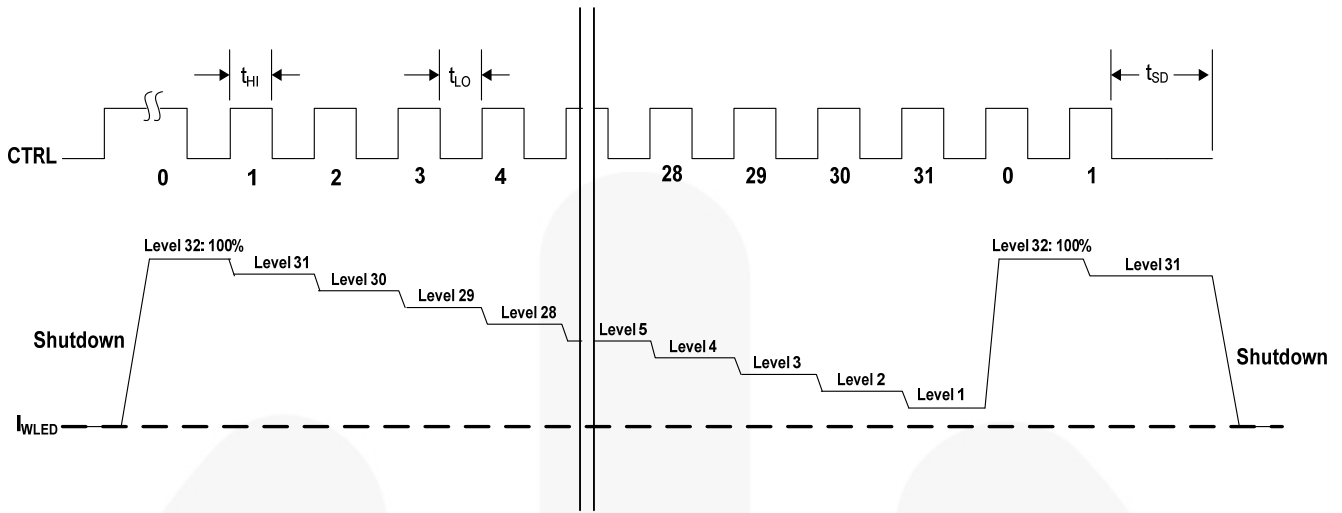
Figure 17. Digital Pulse Dimming Control Diagram

Physical Dimensions

SYMM
Ⓒ

0.95 | 0.95

1.00 MIN

2.60

0.70 MIN

LAND PATTERN RECOMMENDATION

3.00
2.80 Ⓐ

6   4   Ⓑ

3.00
2.60

1.70
1.50

1   3

0.95   0.50
0.30

1.90   ⊕ 0.20Ⓜ A B

(0.30)

SEE DETAIL A

1.10 MAX

1.00
0.70

Ⓒ

0.10
0.00

0.20
0.08

⌒ 0.10 C

GAGE PLANE

0.25

8°
0°

0.55
0.35

SEATING PLANE

0.60 REF

DETAIL A
SCALE: 50X

NOTES: UNLESS OTHERWISE SPECIFIED

A)   THIS PACKAGE CONFORMS TO JEDEC MO-193.
     VAR. AA, ISSUE C, DATED JANUARY 2000.
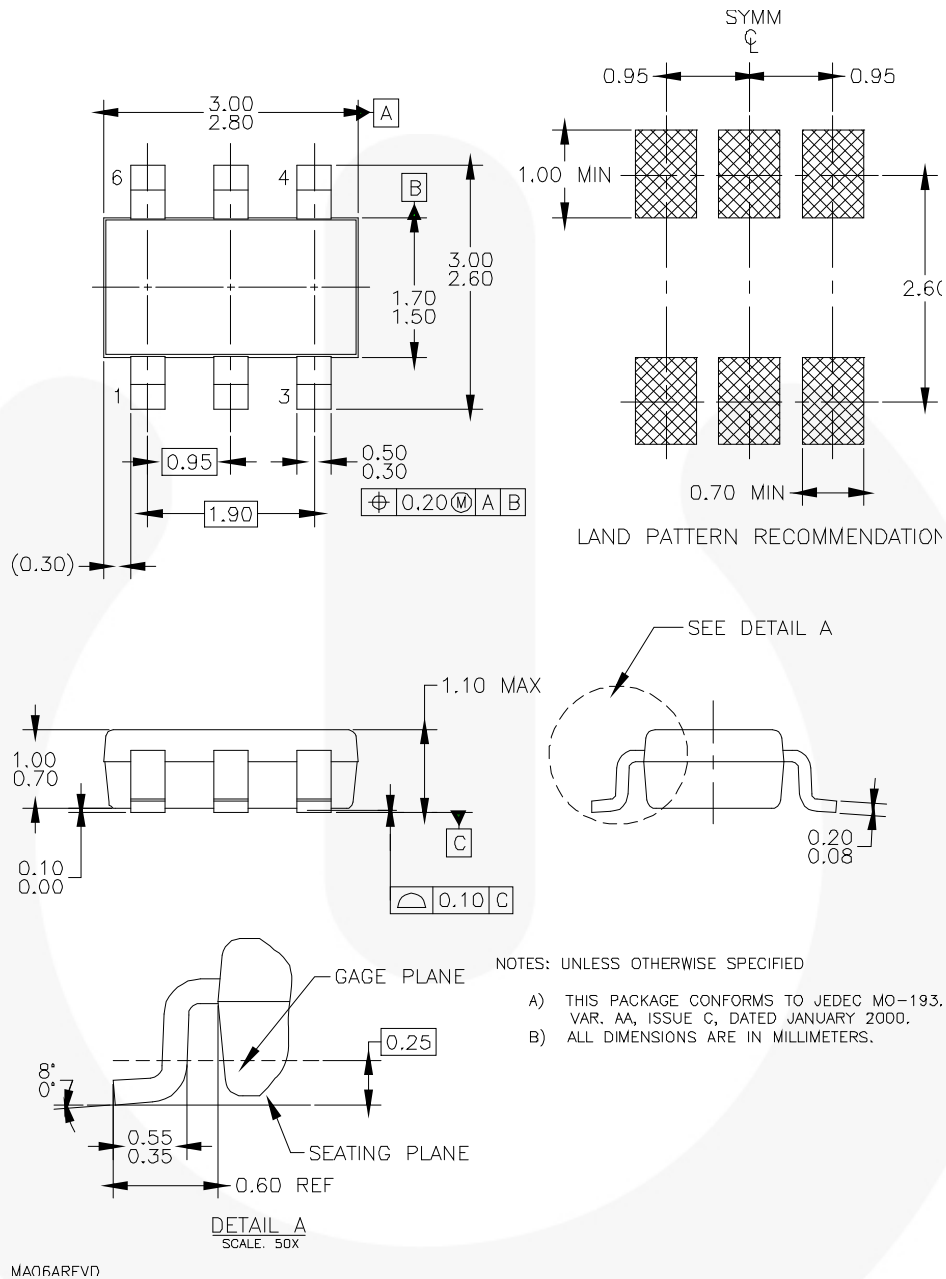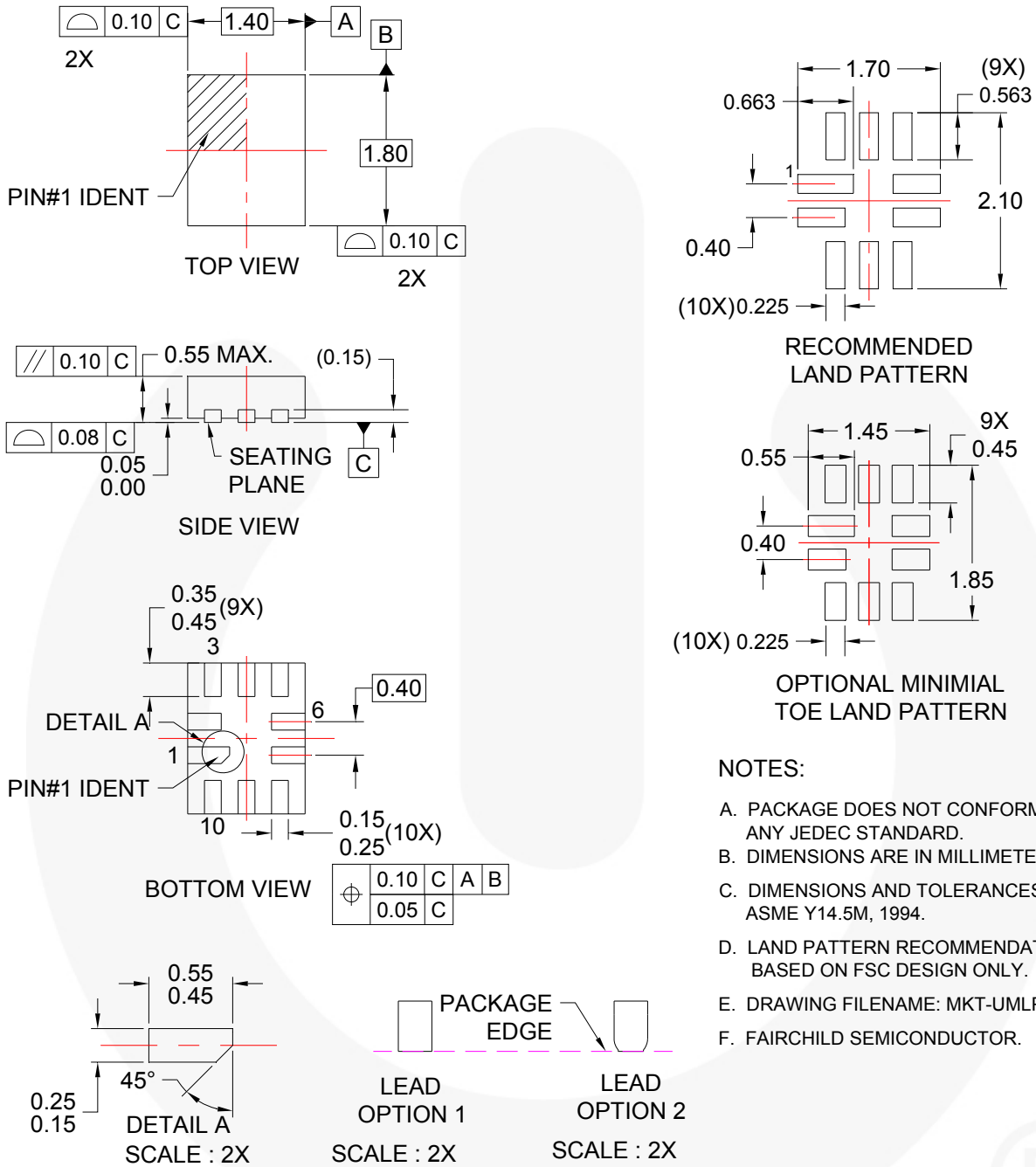B)   ALL DIMENSIONS ARE IN MILLIMETERS.

MA06AREVD

Figure 18. 6-Lead SSOT23

Package drawings are provided as a service to customers considering Fairchild components. Drawings may change in any manner without notice. Please note the revision and/or date on the drawing and contact a Fairchild Semiconductor representative to verify or obtain the most recent revision. Package specifications do not expand the terms of Fairchild's worldwide terms and conditions, specifically the warranty therein, which covers Fairchild products.

Always visit Fairchild Semiconductor's online packaging area for the most recent package drawings:
http://www.fairchildsemi.com/packaging/.

Physical Dimensions (Continued)

0.10 C ← 1.40 → A B
2X

PIN#1 IDENT

1.80

0.10 C
2X

TOP VIEW

// 0.10 C   0.55 MAX.   (0.15)

0.08 C
0.05
0.00

SEATING
PLANE
C

SIDE VIEW

0.35
0.45 (9X)
3

DETAIL A
1

PIN#1 IDENT

6   0.40

10   0.15
0.25 (10X)

BOTTOM VIEW

⊕ 0.10 C A B
0.05 C

0.55
0.45

45°

0.25
0.15

DETAIL A
SCALE : 2X

PACKAGE
EDGE

LEAD
OPTION 1

SCALE : 2X

LEAD
OPTION 2

SCALE : 2X

1.70   (9X)

0.663   0.563

1

2.10

0.40

(10X)0.225

RECOMMENDED
LAND PATTERN

1.45   9X
0.45

0.55

0.40

1.85

(10X) 0.225

OPTIONAL MINIMIAL
TOE LAND PATTERN

NOTES:

A. PACKAGE DOES NOT CONFORM TO
    ANY JEDEC STANDARD.
B. DIMENSIONS ARE IN MILLIMETERS.
C. DIMENSIONS AND TOLERANCES PER
    ASME Y14.5M, 1994.
D. LAND PATTERN RECOMMENDATION IS
    BASED ON FSC DESIGN ONLY.
E. DRAWING FILENAME: MKT-UMLP10Arev5.
F. FAIRCHILD SEMICONDUCTOR.

Figure 19. 10-Lead, Ultrathin Molded Leadless Package (UMLP)
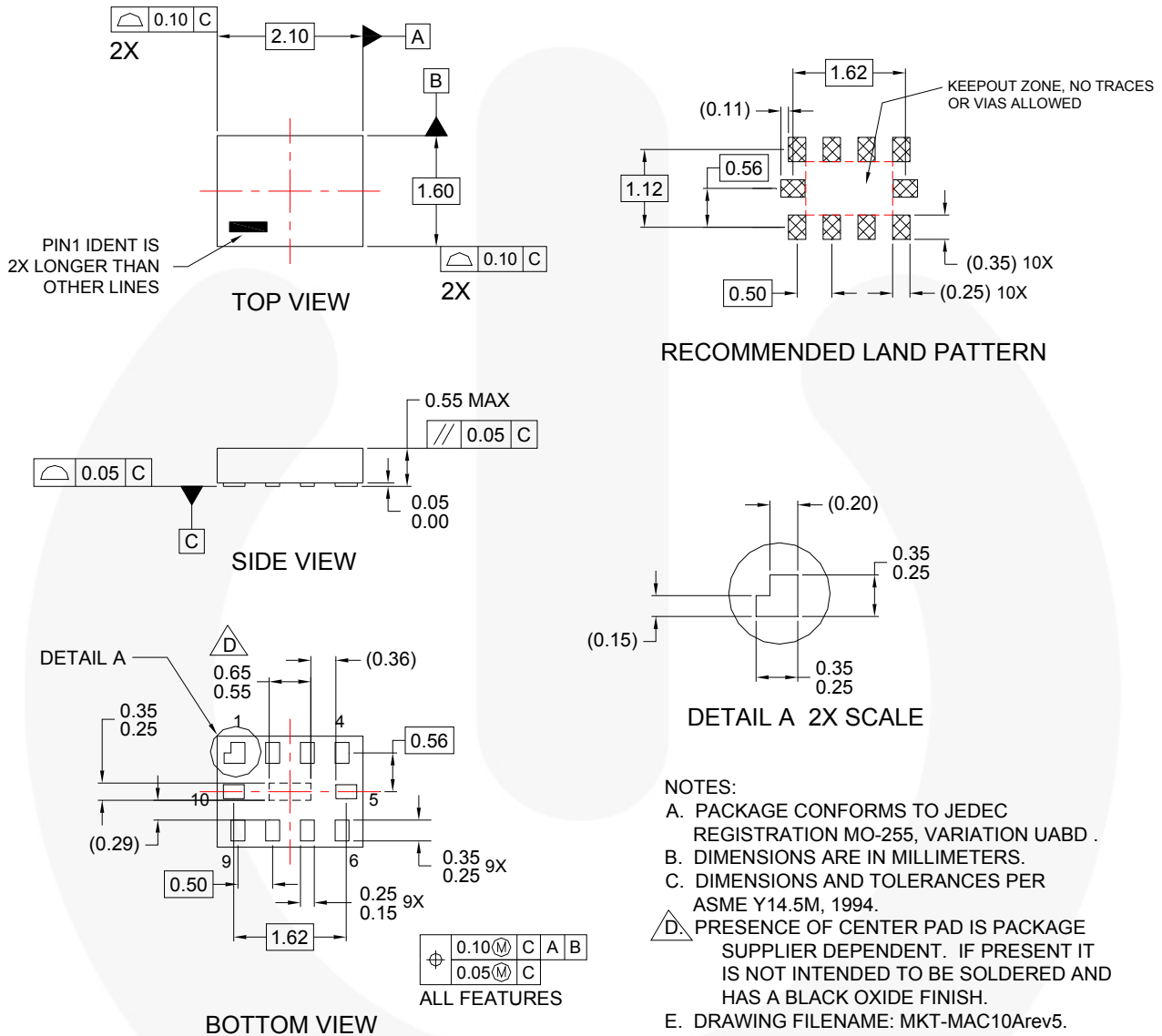
Package drawings are provided as a service to customers considering Fairchild components. Drawings may change in any manner without notice. Please note the revision and/or date on the drawing and contact a Fairchild Semiconductor representative to verify or obtain the most recent revision. Package specifications do not expand the terms of Fairchild's worldwide terms and conditions, specifically the warranty therein, which covers Fairchild products.

Always visit Fairchild Semiconductor's online packaging area for the most recent package drawings:
http://www.fairchildsemi.com/packaging/.

Physical Dimensions (Continued)

```
△ 0.10 C
2X                2.10 ──▶ A

                         B

                         │
                       1.60
                         │
PIN1 IDENT IS            ▽
2X LONGER THAN
OTHER LINES       △ 0.10 C
                              2X
       TOP VIEW
```

TOP VIEW

```
              1.62          KEEPOUT ZONE, NO TRACES
(0.11)                      OR VIAS ALLOWED
        0.56
1.12

                            (0.35) 10X
0.50                        (0.25) 10X
```

RECOMMENDED LAND PATTERN

```
            0.55 MAX
            // 0.05 C

△ 0.05 C
                   0.05
                   0.00
     C
   SIDE VIEW
```

SIDE VIEW

```
                (0.20)
                        0.35
                        0.25

(0.15)

                0.35
                0.25
```

DETAIL A 2X SCALE

```
DETAIL A    D
          0.65    (0.36)
          0.55
  0.35
  0.25     1      4
                        0.56
  10              5
(0.29)
          9       6
                      0.35  9X
  0.50                0.25
              0.25  9X
              0.15
     1.62
            ⊕  0.10Ⓜ C A B
               0.05Ⓜ C
         ALL FEATURES
   BOTTOM VIEW
```

BOTTOM VIEW

NOTES:
A. PACKAGE CONFORMS TO JEDEC
    REGISTRATION MO-255, VARIATION UABD .
B. DIMENSIONS ARE IN MILLIMETERS.
C. DIMENSIONS AND TOLERANCES PER
    ASME Y14.5M, 1994.
D. PRESENCE OF CENTER PAD IS PACKAGE
    SUPPLIER DEPENDENT. IF PRESENT IT
    IS NOT INTENDED TO BE SOLDERED AND
    HAS A BLACK OXIDE FINISH.
E. DRAWING FILENAME: MKT-MAC10Arev5.

Figure 20. 10-Lead MicroPak™ MLP

Package drawings are provided as a service to customers considering Fairchild components. Drawings may change in any manner without notice. Please note the revision and/or date on the drawing and contact a Fairchild Semiconductor representative to verify or obtain the most recent revision. Package specifications do not expand the terms of Fairchild's worldwide terms and conditions, specifically the warranty therein, which covers Fairchild products.

Always visit Fairchild Semiconductor's online packaging area for the most recent package drawings:
http://www.fairchildsemi.com/packaging/.

TRADEMARKS

The following includes registered and unregistered trademarks and service marks, owned by Fairchild Semiconductor and/or its global subsidiaries, and is not intended to be an exhaustive list of all such trademarks.

2Cool™	FPS™		Sync-Lock™
AccuPower™	F-PFS™	®	SYSTEM GENERAL
AX-CAP®*	FRFET®	PowerTrench®	
BitSiC™	Global Power Resource℠	PowerXS™	TinyBoost™
Build it Now™	GreenBridge™	Programmable Active Droop™	TinyBuck™
CorePLUS™	Green FPS™	QFET®	TinyCalc™
CorePOWER™	Green FPS™ e-Series™	QS™	TinyLogic®
CROSSVOLT™	Gmax™	Quiet Series™	TINYOPTO™
CTL™	GTO™	RapidConfigure™	TinyPower™
Current Transfer Logic™	IntelliMAX™	™	TinyPWM™
DEUXPEED®	ISOPLANAR™	Saving our world, 1mW/W/kW at a time™	TinyWire™
Dual Cool™	Making Small Speakers Sound Louder and Better™	SignalWise™	TranSiC™
EcoSPARK®		SmartMax™	TriFault Detect™
EfficientMax™	MegaBuck™	SMART START™	TRUECURRENT®*
ESBC™	MICROCOUPLER™	Solutions for Your Success™	µSerDes™
F®	MicroFET™	SPM®	
	MicroPak™	STEALTH™	UHC®
Fairchild®	MicroPak2™	SuperFET®	Ultra FRFET™
Fairchild Semiconductor®	MillerDrive™	SuperSOT™-3	UniFET™
FACT Quiet Series™	MotionMax™	SuperSOT™-6	VCX™
FACT®	mWSaver™	SuperSOT™-8	VisualMax™
FAST®	OptoHiT™	SupreMOS®	VoltagePlus™
FastvCore™	OPTOLOGIC®	SyncFET™	XS™
FETBench™	OPTOPLANAR®		

* Trademarks of System General Corporation, used under license by Fairchild Semiconductor.

DISCLAIMER
FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION, OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS. THESE SPECIFICATIONS DO NOT EXPAND THE TERMS OF FAIRCHILD'S WORLDWIDE TERMS AND CONDITIONS, SPECIFICALLY THE WARRANTY THEREIN, WHICH COVERS THESE PRODUCTS.

LIFE SUPPORT POLICY
FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF FAIRCHILD SEMICONDUCTOR CORPORATION.

As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.

2. A critical component in any component of a life support, device, or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

ANTI-COUNTERFEITING POLICY
Fairchild Semiconductor Corporation's Anti-Counterfeiting Policy. Fairchild's Anti-Counterfeiting Policy is also stated on our external website, www.fairchildsemi.com, under Sales Support.

Counterfeiting of semiconductor parts is a growing problem in the industry. All manufacturers of semiconductor products are experiencing counterfeiting of their parts. Customers who inadvertently purchase counterfeit parts experience many problems such as loss of brand reputation, substandard performance, failed applications, and increased cost of production and manufacturing delays. Fairchild is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. Fairchild strongly encourages customers to purchase Fairchild parts either directly from Fairchild or from Authorized Fairchild Distributors who are listed by country on our web page cited above. Products customers buy either from Fairchild directly or from Authorized Fairchild Distributors are genuine parts, have full traceability, meet Fairchild's quality standards for handling and storage and provide access to Fairchild's full range of up-to-date technical and product information. Fairchild and our Authorized Distributors will stand behind all warranties and will appropriately address any warranty issues that may arise. Fairchild will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. Fairchild is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

PRODUCT STATUS DEFINITIONS
Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative / In Design	Datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	Datasheet contains preliminary data; supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve design.
No Identification Needed	Full Production	Datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve the design.
Obsolete	Not In Production	Datasheet contains specifications on a product that is discontinued by Fairchild Semiconductor. The datasheet is for reference information only.

Rev. I64

PUBLICATION ORDERING INFORMATION

© Semiconductor Components Industries, LLC

www.onsemi.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[ON Semiconductor](#):

  [FAN5624UMPX](#)