

## I. ORDER ENTRY

Orders for products contained herein should be directed to: LINEAR TECHNOLOGY CORPORATION, 1630 McCarthy Boulevard, Milpitas, California 95035. Phone: 408-432-1900.

## II. ORDERING INFORMATION

Minimum order and line minimum is \$2000.00.

Each item must be ordered using the complete part number exactly as listed on the data sheet.

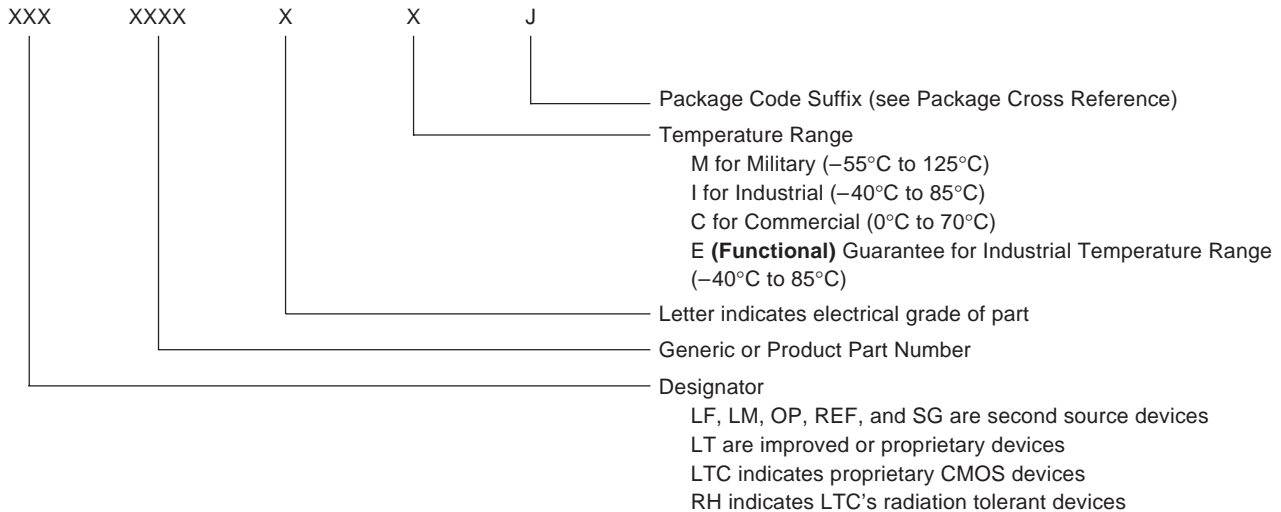
F.O.B.: Milpitas, California.

## III. RELIABILITY PROGRAMS

Linear Technology Corporation currently offers the following Reliability Programs:

- A. QML devices processed to 38510 slash sheets (formerly JAN QPL, class level S)
- B. "R-Flow" Burn-in program for commercial temperature range devices. Consult factory regarding burn-in program.
- C. Radiation tolerant products (RH prefix – LTC proprietary radiation hardening process).

## IV. PART NUMBER EXPLANATION



## V. PACKAGE CODE SUFFIX EXPLANATION

SUFFIX DESIGNATOR	GENERIC PACKAGE	PACKAGE DESCRIPTION (Plastic Packages Unless Otherwise Noted)
DD	DFN	8L (3mm X 3mm, DD8) <i>Notes 6, 7, 8</i>
DE	DFN	12L (4mm X 3mm, DE12) <i>Notes 6, 7, 8</i>
F	TSSOP	16-, 20-, 28-Lead TSSOP, Thin Shrink Small Outline Package 4.4mm (0.173") <i>Notes 6, 7, 8</i>
FE	TSSOP, EXP PAD	16-, 20-, 28-Lead TSSOP, Thin Shrink Small Outline Package with exposed die pad. <i>Notes 6, 7, 8</i>
G	SSOP	16-, 20-, 24- and 28-Lead SSOP, Shrink Small Outline Package 5.3mm (0.209") <i>Notes 5, 6, 7, 8</i>
GN	SSOP	16-, 20-, 24- and 28-Lead SSOP, Narrow Body, Shrink Small Outline Package 3.81mm (0.150") <i>Notes 5, 6, 7, 8</i>
GW	SSOP	36- and 44-Lead SSOP, Wide Body, Shrink Small Outline Package 7.62mm (0.300") <i>Notes 5, 6, 7, 8</i>
H	"H" is used for Multiple Styles of Metal Cans, as follows:	
	METAL CAN	8- or 10-Lead TO-5, Transistor Outline Metal Can Package
	METAL CAN	3- or 4-Lead TO-39, Transistor Outline Metal Can Package
	METAL CAN	2-, 3- or 4-Lead TO-46, Transistor Outline Metal Can Standard Package or in Thermal Caps
	METAL CAN	3-Lead TO-52, Transistor Outline Metal Can Package
L	LCC	20-Pin LCC, Rectangular Shaped, Leadless Chip Carrier Package (Hermetic)
LS	LCC	20-Pin LCC, Square Shaped, Leadless Chip Carrier Package (Hermetic)

# GENERAL ORDERING INFORMATION

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SUFFIX DESIGNATOR	GENERIC PACKAGE	PACKAGE DESCRIPTION (Plastic Packages Unless Otherwise Noted)
M	DD Pak	3-Lead DD Pak, <i>Notes 6, 7, 8</i>
MS	MSOP	10-Lead MSOP, Micro Small Outline Package
MSE	MSOP, EXP PAD	10-Lead MSOP, Micro Small Outline Package with exposed die pad
MS8	MSOP	8-Lead MSOP, Micro Small Outline Package <i>Notes 6, 7, 8</i>
MS8E	MSOP, EXP PAD	8-Lead MSOP, Micro Small Outline Package with exposed die pad
N	PDIP	14-, 16-, 18-, 20- and 24-Lead PDIP, Narrow Body, Plastic Dual-In-Line Package (0.300") <i>Notes 6, 7, 8</i>
NW	PDIP	28-Lead PDIP, Wide Body, Plastic Dual-In-Line Package (0.600") <i>Notes 6, 7, 8</i>
N8	PDIP	8-Lead PDIP, Narrow Body, Plastic Dual-In-Line Package (0.300") <i>Notes 6, 7, 8</i>
P	TO-3P	3-Lead TO-3P, Transistor Outline Package (Similar to a TO-247) <i>Notes 6, 7, 8</i>
Q	DD Pak	5-Lead DD Pak, <i>Notes 6, 7, 8</i>
R	DD Pak	7-Lead DD Pak, <i>Notes 6, 7, 8</i>
S	SO	14- and 16-Lead SO, Narrow Body, Small Outline Package (0.150") <i>Notes 1, 2, 6, 7, 8</i>
ST	SOT-223	3-Lead SOT-223, Small Outline Transistor Package <i>Notes 6, 7, 8</i>
SW	SO	16-, 18-, 20-, 24-, and 28-Lead SO, Wide Body, Small Outline Package (0.300") <i>Notes 1, 2, 6, 7, 8</i>
S3	SOT-23	3-Lead SOT-23, Small Outline Transistor Package <i>Notes 6, 7, 8</i>
S4	SOT-143	4-Lead SOT-143, Small Outline Transistor Package <i>Notes 6, 7, 8</i>
S5	SOT-23	5-Lead SOT-23, Small Outline Transistor Package <i>Notes 6, 7, 8</i>
S6	SOT-23	6-Lead SOT-23, Small Outline Transistor Package <i>Notes 6, 7, 8</i>
S8	SO	8-Lead SO, Narrow Body, Small Outline Package (0.150") <i>Notes 3, 6, 7, 8</i>
T	TO-220	3- or 5-Lead TO-220, Transistor Outline Package <i>Notes 4, 6, 7, 8</i>
T7	TO-220	7-Lead TO-220, Transistor Outline Package (Formerly "Y" Pkg.) <i>Notes 4, 6, 7, 8</i>
UD	QFN	16L (3mm X 3mm, UD16)
UF	QFN	16L (4mm X 4mm, UF16)
UH	QFN	32L (5mm X 5mm, UH32)
W	FLATPAK	10- or 14-Lead FLATPAK, Glass Sealed Package (Hermetic)
WB	FLATPAK	10- or 14-Lead FLATPAK, Metal Sealed, Bottom Brazed Package (Hermetic)
Z	TO-92	3-Lead TO-92, Transistor Outline Package <i>Notes 6, 7, 8</i>

## (For Notes Below, All Dimensions Shown in Inches)

**Note 1:** 16-Lead SO (Small Outline) package is delivered in either narrow (0.150) or wide body (0.300) package styles depending on the device die size. See specific data sheet for pin counts and package dimensions.

**Note 2:** 18-, 20-, 24- and 28-Lead SO (Small Outline) packages are wide body styles (0.300).

**Note 3:** Pinout and electrical specifications on S8 (8-Lead Small Outline) package may differ from a standard commercial grade N8 package. See SO (Small Outline) data sheets for specific information.

**Note 4:** SPECIAL FLOW Lead Form Configurations (trimmed and/or formed) are available for TO-220 packages. For TO-220 Lead Bend Options consult factory for details.

**Note 5:** SSOP Shrink Small Outline Packages vary in lead pitch. G = 0.0256, GN = 0.0250, GW = 0.03150.

**Note 6: FLAMMABILITY RATING:** Mold compound used in all plastic packages supplied by LTC have obtained Underwriters Laboratories' Flame Retardancy Certification Rating of UL94V-0.

**Note 7: TOXIC MATERIALS:** Molding compounds used by our assembly subcontractors do not contain toxic materials known as Polybrominated Biphenyls (PBB), Polybrominated Biphenyl Ether (PBBE) or Polybrominated Biphenyl Oxide (PBBO).

**Note 8: OXYGEN INDEX:** Mold compound used in all plastic packages supplied by LTC have an oxygen index of 28% minimum.