

LOW CAPACITANCE FLIP CHIP ARRAY

APPLICATIONS

- ✓ Cellular Phones
- ✓ Personal Digital Assistant (PDA)
- ✓ Notebook Computers
- ✓ SMART Cards

IEC COMPATIBILITY (EN61000-4)

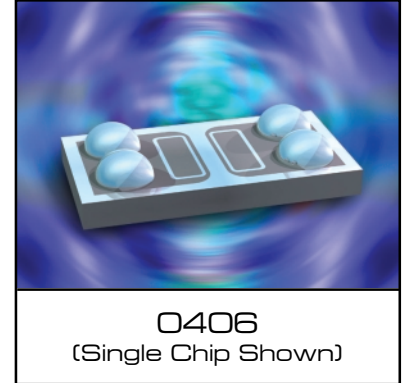
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns

FEATURES

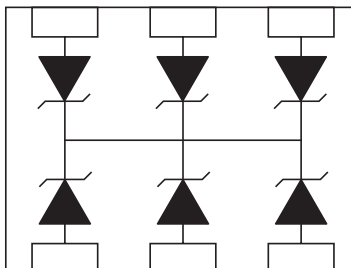
- ✓ ESD Protection > 25 kilovolts
- ✓ Available in Six Voltage Types Ranging From 3.3V to 24V
- ✓ 200 Watts Peak Pulse Power per Line ($t_p = 8/20\mu s$)
- ✓ Low Clamping Voltage
- ✓ Bidirectional Configuration & Monolithic Structure
- ✓ Protects 3 to 5 Lines
- ✓ **LOW CAPACITANCE**
- ✓ **LOW LEAKAGE CURRENT**

MECHANICAL CHARACTERISTICS

- ✓ Standard EIA Chip Size: 0406
- ✓ Weight 0.73 milligrams (Approximate)
- ✓ Flammability Rating UL 94V-0
- ✓ 8mm Plastic & Paper Tape and Reel Per EIA Standard 481
- ✓ Device Marking On Reel
- ✓ Top Contacts: Solder Bump 0.004" in Height (Nominal)



PIN CONFIGURATION



DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power ($t_p = 8/20\mu s$) - See Figure 1	P_{PP}	200	Watts
Operating Temperature	T_J	-55°C to 150°C	°C
Storage Temperature	T_{STG}	-55°C to 150°C	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER (See Note 1)	RATED STAND-OFF VOLTAGE V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ $I_p = 1A$ V_C VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ 8/20 μs V_C @ I_{PP}	MAXIMUM LEAKAGE CURRENT (See Note 2) @ V_{WM} I_D μA	TYPICAL CAPACITANCE 0V @ 1 MHz C pF
LC0406FC3.3C	3.3	4.0	7.0	12.5V @ 16A	75*	70
LC0406FC05C	5.9	6.0	11.0	13V @ 15A	10**	35
LC0406FC08C	8.0	8.5	13.2	18V @ 11A	1	32
LC0406FC12C	12.0	13.3	19.8	26.9V @ 7.4A	1	30
LC0406FC15C	15.0	16.7	25.4	34.5V @ 5.8A	1	25
LC0406FC24C	24.0	26.7	37.2	50.6V @ 4A	1	20

Note 1: All devices are bidirectional. Electrical characteristics apply in both directions.

Note 2: *Maximum leakage current < 5 μA @ 2.8V. **Maximum leakage current < 500nA @ 3.3V.

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

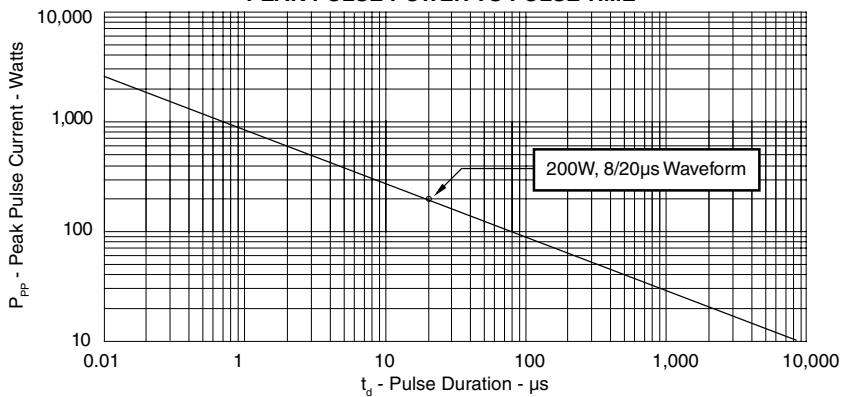
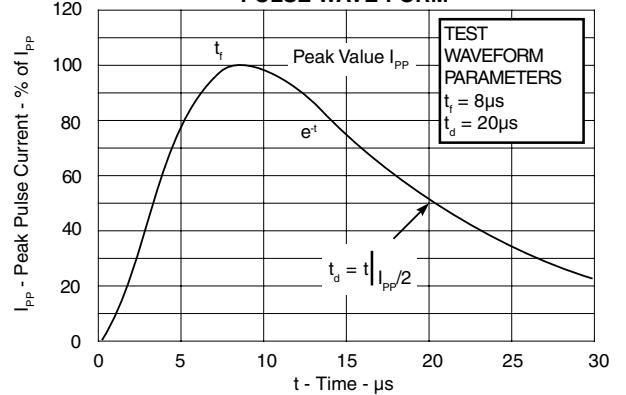
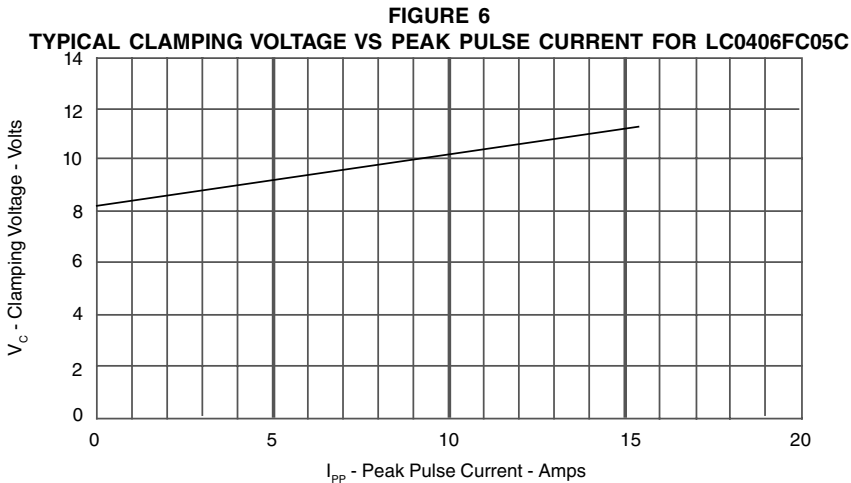
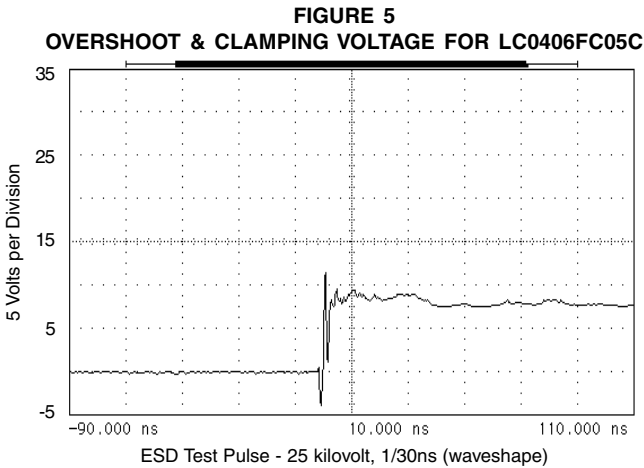
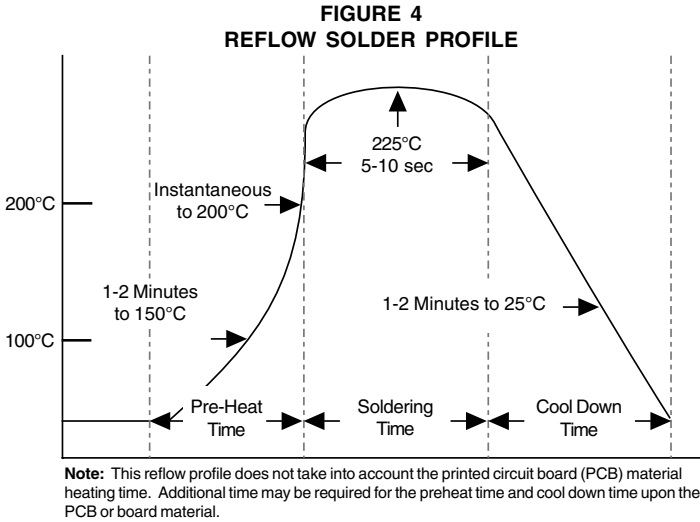
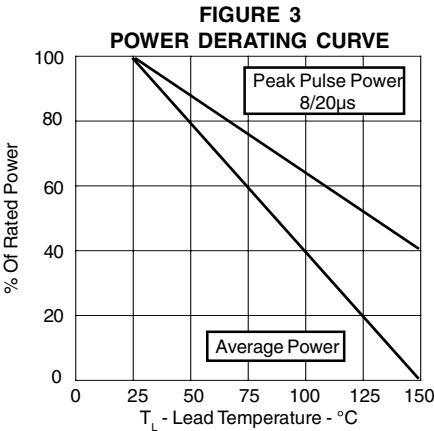


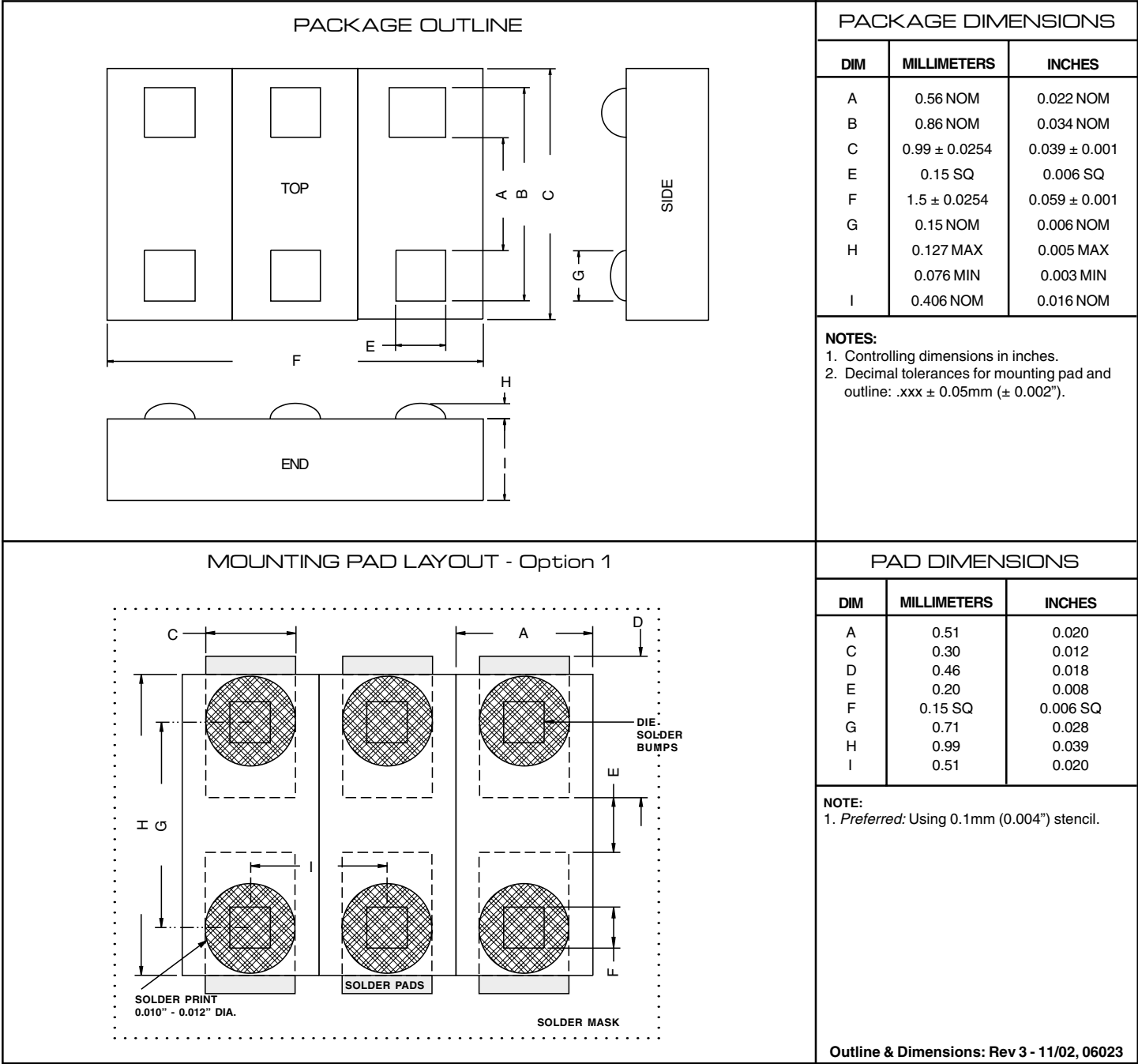
FIGURE 2
PULSE WAVE FORM



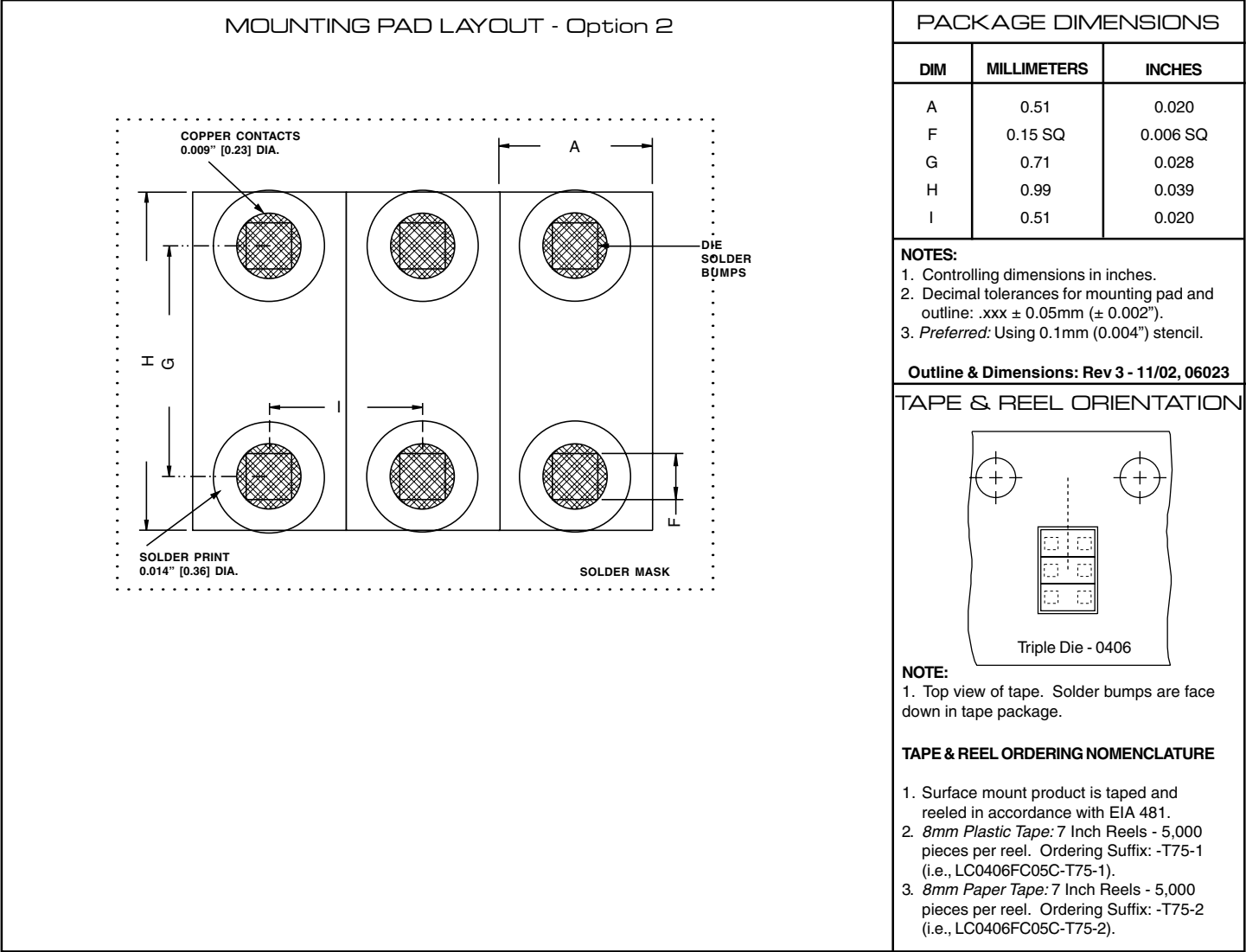
GRAPHS



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