



P0404FC3.3C*
thru
P0404FC36C*

BIDIRECTIONAL FLIP CHIP

APPLICATIONS

- ✓ Cellular Phones
- ✓ MCM Boards
- ✓ Wireless Communication Circuits
- ✓ IR LEDs
- ✓ SMART Cards & PCMCIA Cards

IEC COMPATIBILITY (EN61000-4)

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

FEATURES

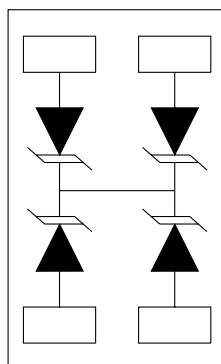
- ✓ ESD Protection > 25 kilovolts
- ✓ Available in Multiple Voltage Types Ranging From 3.3V to 36V
- ✓ 250 Watts Peak Pulse Power Dissipation per Line (8/20 μ s)
- ✓ Monolithic Structure

MECHANICAL CHARACTERISTICS

- ✓ Standard EIA Chip Size: 0404
- ✓ 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)



CIRCUIT DIAGRAM



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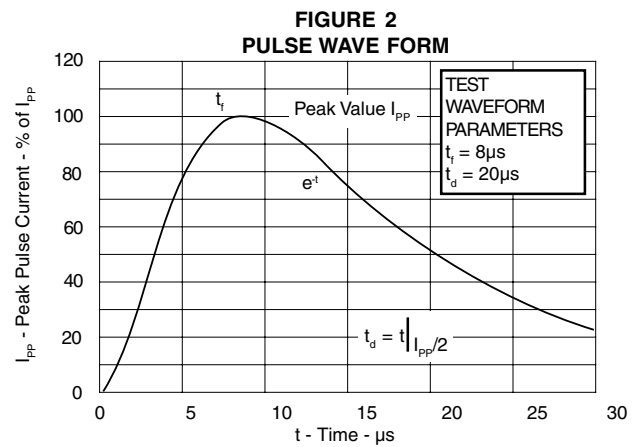
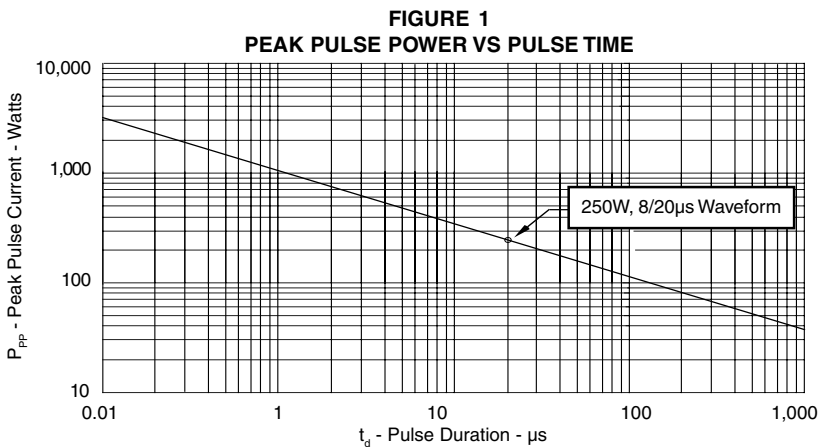
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DEVICE CHARACTERISTICS

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}	250	Watts
Operating Temperature	T_J	-55°C to 150°C	°C
Storage Temperature	T_{STG}	-55°C to 150°C	°C

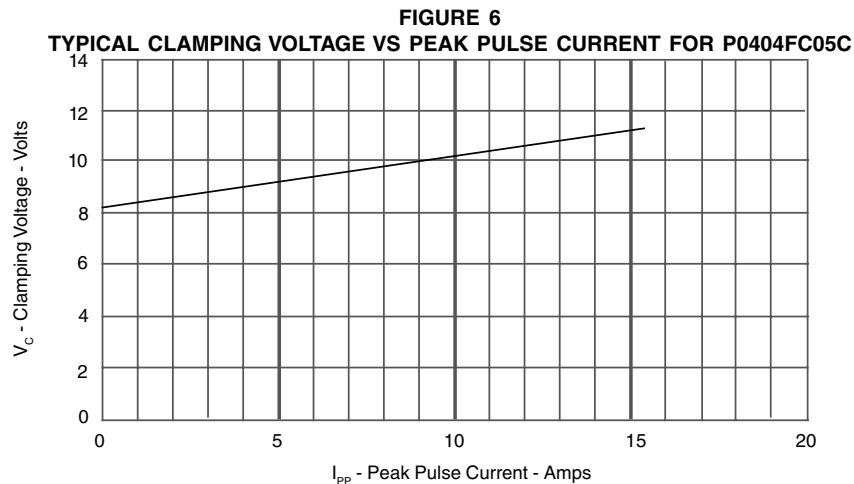
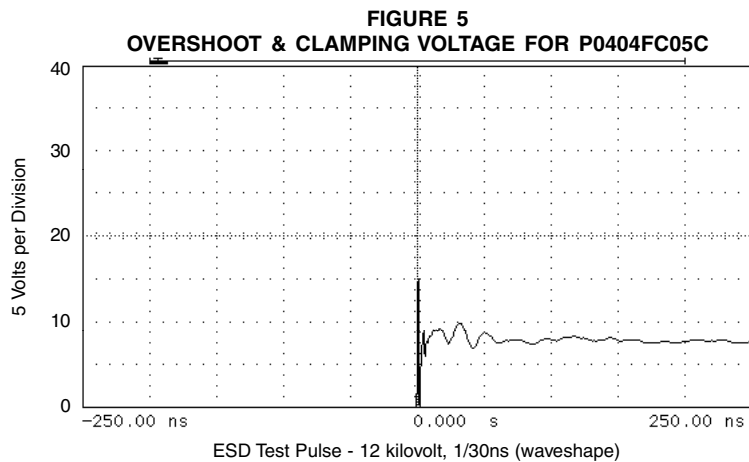
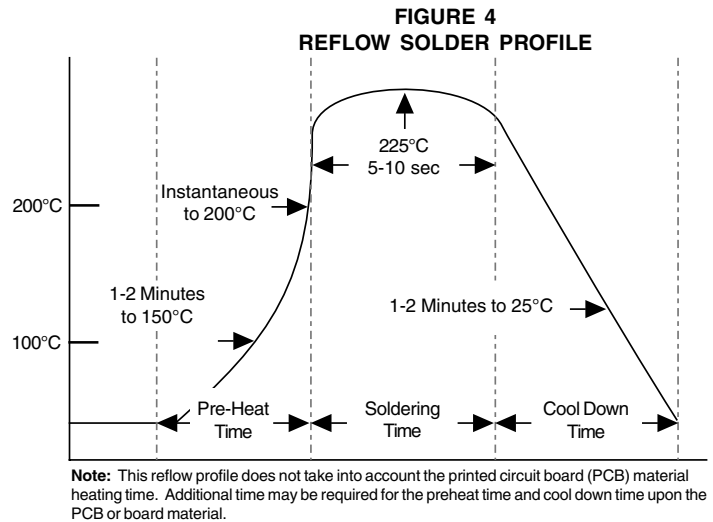
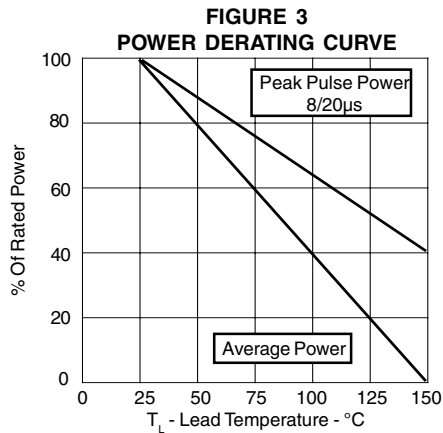
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified						
PART NUMBER (See Note 1)	RATED STAND-OFF VOLTAGE	MINIMUM BREAKDOWN VOLTAGE	MAXIMUM CLAMPING VOLTAGE (See Fig. 2)	MAXIMUM CLAMPING VOLTAGE (See Fig. 2)	MAXIMUM LEAKAGE CURRENT	TYPICAL CAPACITANCE
	V_{WM} VOLTS	@ 1mA $V_{(BR)}$ VOLTS	@ $I_p = 1A$ V_C VOLTS	@ 8/20 μs V_C @ I_{PP}	@ V_{WM} I_D μA	0V @ 1 MHz C pF
P0404FC3.3C	3.3	4.0	7.0	12.5V @ 20A	75	150
P0404FC05C	5.0	6.0	9.8	14.7V @ 17A	10	100
P0404FC08C	8.0	8.5	13.4	19.2V @ 13A	10	75
P0404FC12C	12.0	13.3	19.0	29.7V @ 9.0A	1	50
P0404FC15C	15.0	16.7	24.0	35.7V @ 7.0A	1	40
P0404FC24C	24.0	26.7	43.0	55.0V @ 5.0A	1	30
P0404FC36C	36.0	40.0	64.0	84.0V @ 3.0A	1	25

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



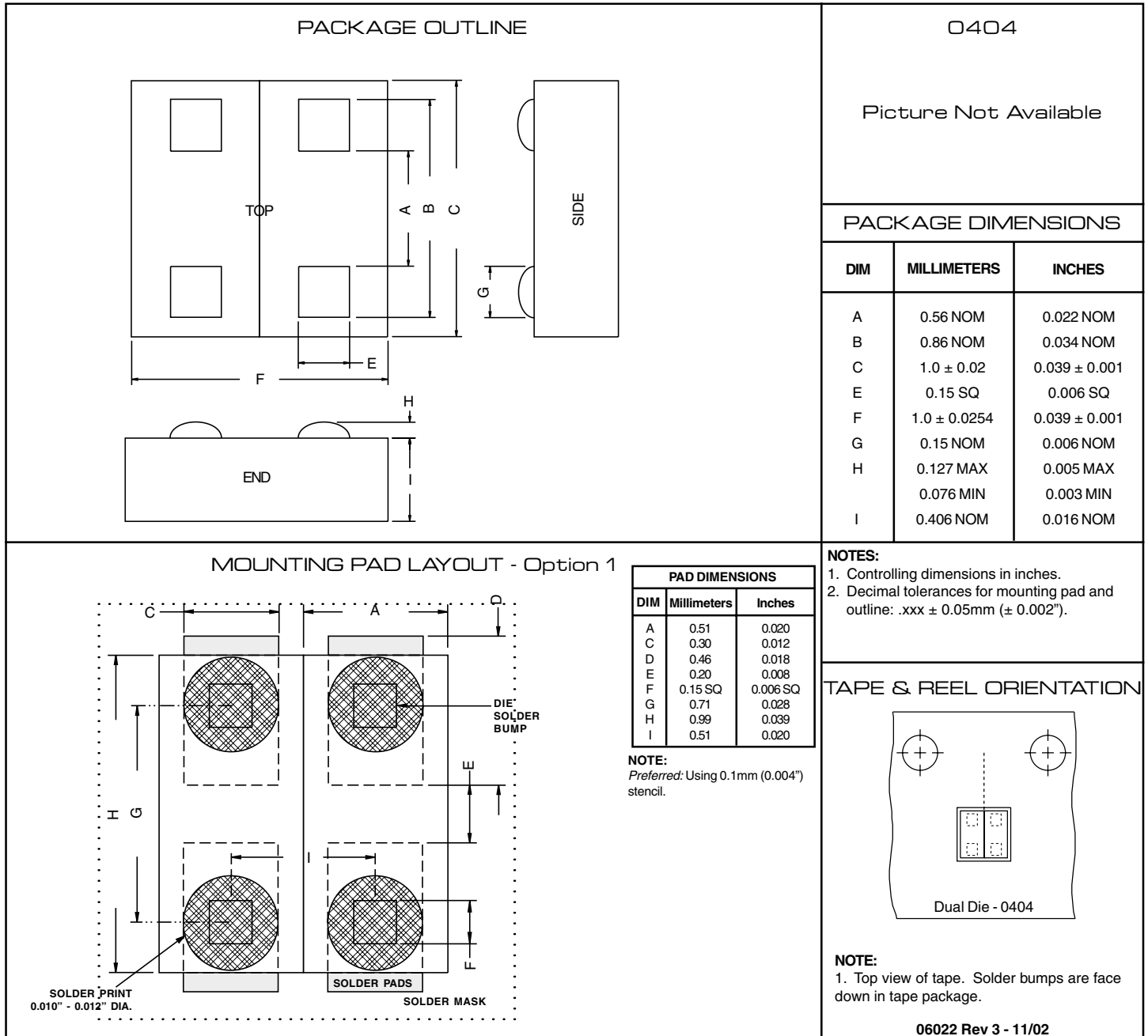
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GRAPHS



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PACKAGE OUTLINE & DIMENSIONS



TAPE & REEL ORIENTATION

Dual Die - 0404

NOTE:
1. Top view of tape. Solder bumps are face down in tape package.

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TAPE & REEL ORDERING INFORMATION:

Surface mount product is taped and reeled in accordance with EIA-481.

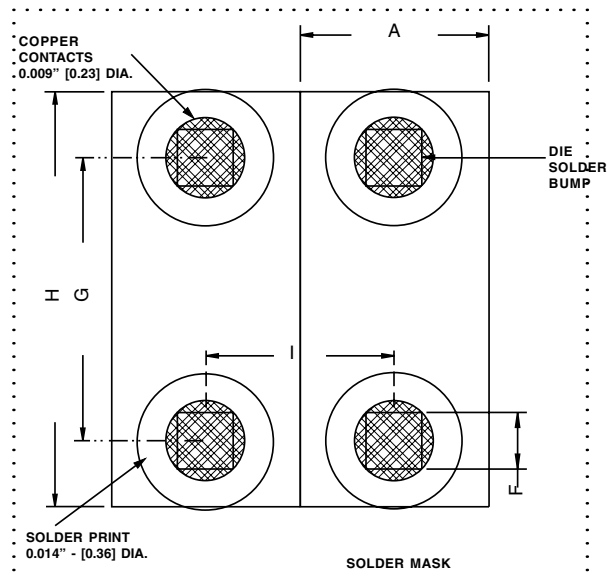
Plastic Tape: 7 Inch Reels - 5,000 pieces per reel. Ordering Suffix: -T75-1 (i.e., P0404FC05C-T75-1).

Paper Tape: 7 Inch Reels - 10,000 pieces per reel. Ordering Suffix: -T710-2 (i.e., P0404FC05C-T710-2).

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PACKAGE OUTLINE & DIMENSIONS

MOUNTING PAD LAYOUT - Option 2



PAD DIMENSIONS

DIM	Millimeters	Inches
A	0.51	0.020
F	0.15 SQ	0.006 SQ
G	0.71	0.028
H	0.99	0.039
I	0.51	0.020

NOTES:

1. Controlling dimensions in inches.
2. Decimal tolerances for mounting pad and outline:
.xxx ± 0.05mm (± 0.002").
3. Preferred: Using 0.1mm (0.004") stencil.

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