

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

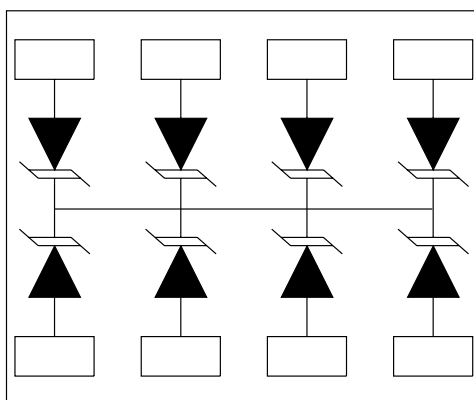
- ✓ ESD Protection > 25 kilovolts
- ✓ Available in Multiple Voltage Types Ranging From 3.3V to 36V
- ✓ 250 Watts Peak Pulse Power Dissipation per Line (8/20μs)
- ✓ Monolithic Structure

MECHANICAL CHARACTERISTICS

- ✓ Standard EIA Chip Size: 0408
- ✓ 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



P0408FC3.3C*

thru

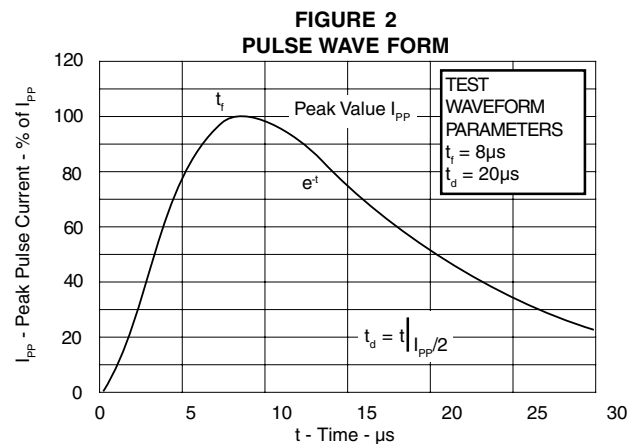
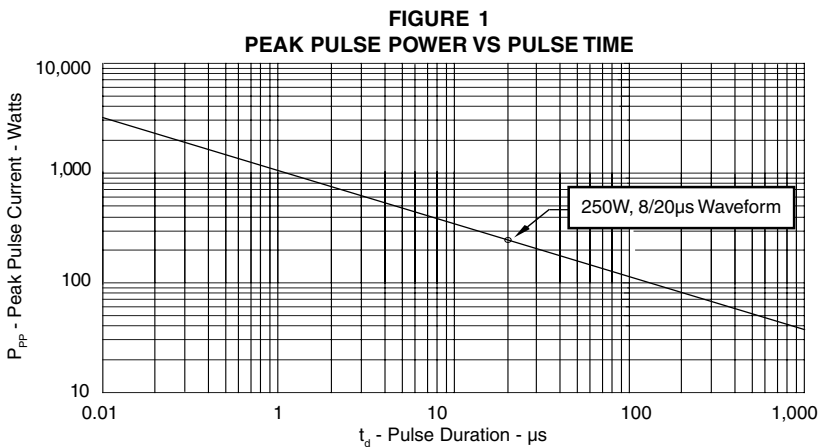
P0408FC36C*

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

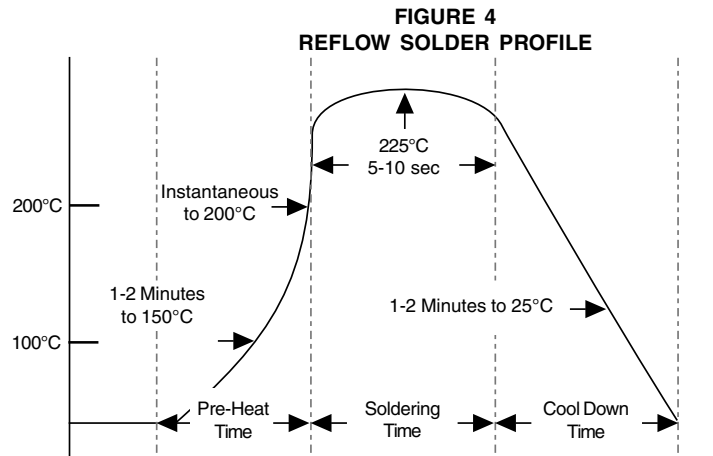
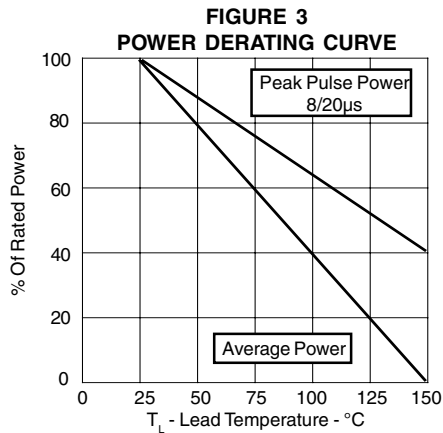
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified						
PART NUMBER (See Note 1)	RATED STAND-OFF VOLTAGE V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ $I_p = 1A$ V_C VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ 8/20 μs V_C @ I_{PP}	MAXIMUM LEAKAGE CURRENT @ V_{WM} I_D μA	TYPICAL CAPACITANCE 0V @ 1 MHz C pF
P0408FC3.3C	3.3	4.0	7.0	12.5V @ 20A	75	150
P0408FC05C	5.0	6.0	9.8	14.7V @ 17A	10	100
P0408FC08C	8.0	8.5	13.4	19.2V @ 13A	10	75
P0408FC12C	12.0	13.3	19.0	29.7V @ 9.0A	1	50
P0408FC15C	15.0	16.7	24.0	35.7V @ 7.0A	1	40
P0408FC24C	24.0	26.7	43.0	55.0V @ 5.0A	1	30
P0408FC36C	36.0	40.0	64.0	84.0V @ 3.0A	1	25

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

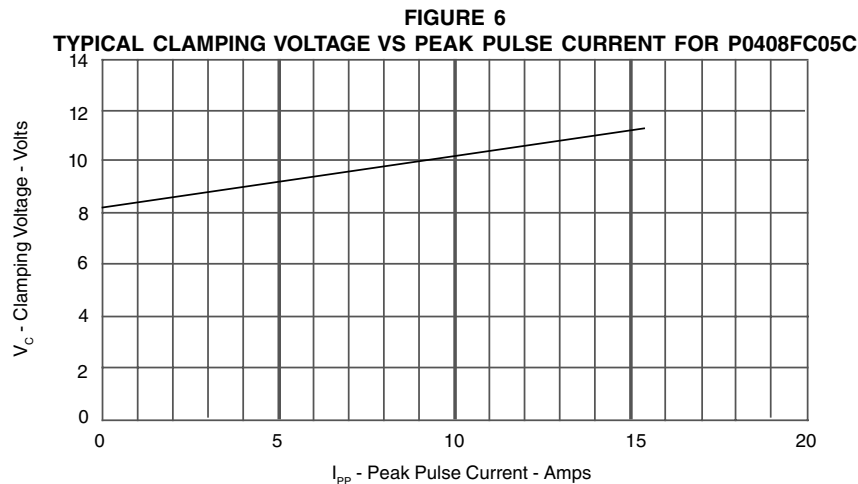
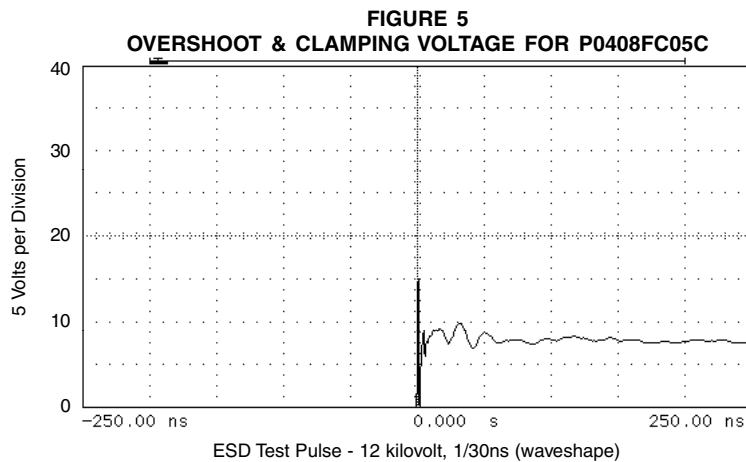


P0408FC3.3C* thru P0408FC36C*

GRAPHS

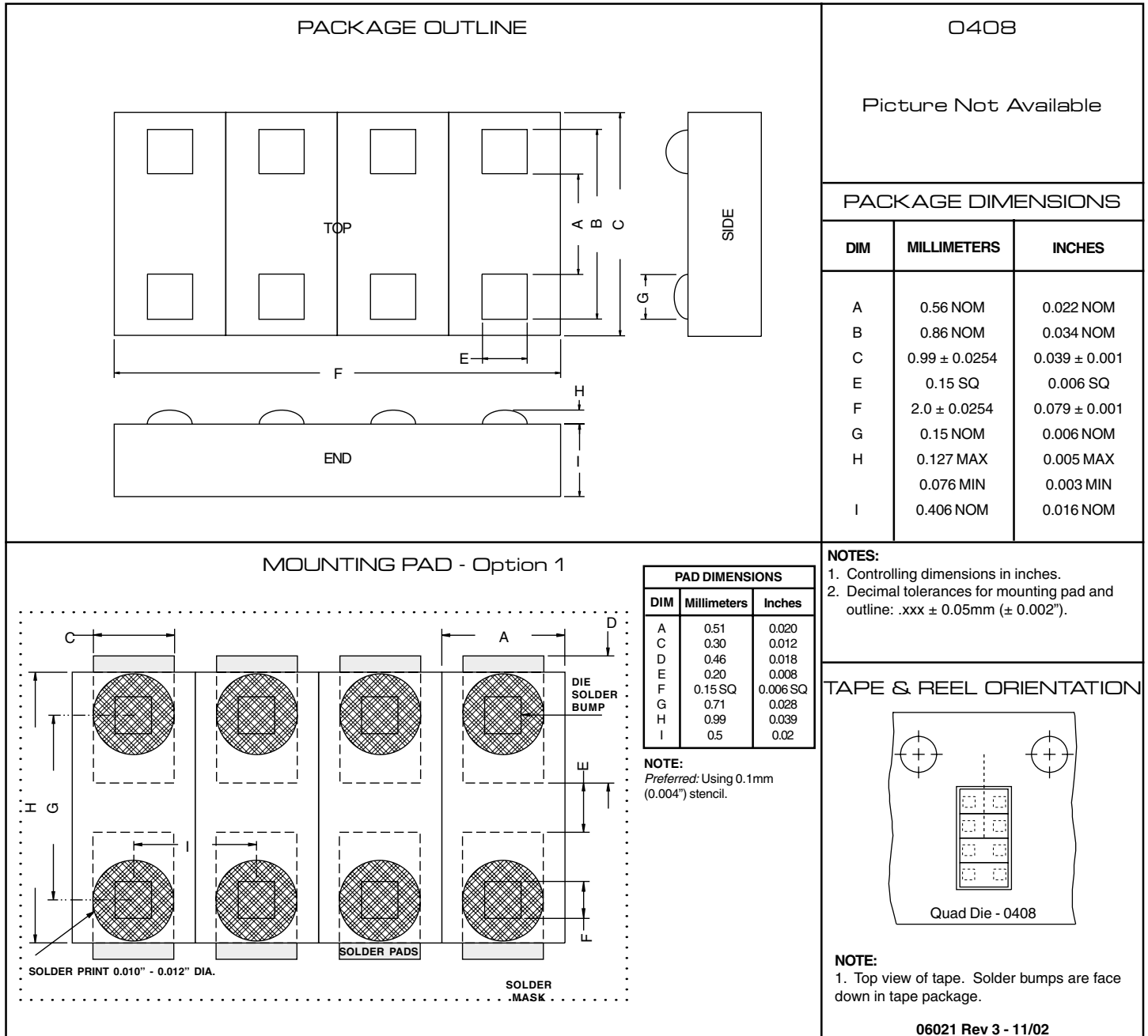


Note: This reflow profile does not take into account the printed circuit board (PCB) material heating time. Additional time may be required for the preheat time and cool down time upon the PCB or board material.



P0408FC3.3C* thru P0408FC36C*

PACKAGE OUTLINE & DIMENSIONS



TAPE & REEL ORIENTATION

Quad Die - 0408

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.

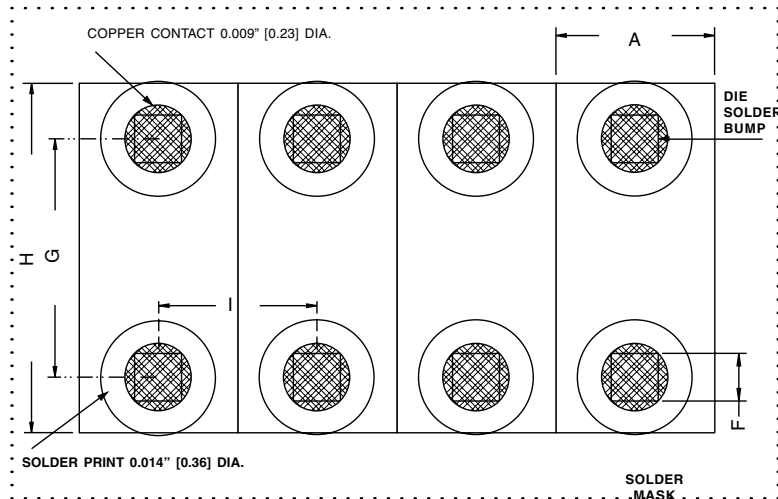
Plastic Tape: 7 Inch Reels - 5,000 pieces per reel. Ordering Suffix: -T75-1 (i.e., P0408FC05C-T75-1).

Paper Tape: 7 Inch Reels - 10,000 pieces per reel. Ordering Suffix: -T710-2 (i.e., P0408FC05C-T710-2).

PO408FC3.3C* thru PO408FC36C*

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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ProTek Devices

2929 South Fair Lane, Tempe, AZ 85282

Tel: 602-431-8101 Fax: 602-431-2288

E-Mail: sales@protekdevices.com

Web Site: www.protekdevices.com