

ULTRA LOW CAPACITANCE STEERING DIODE ARRAY**APPLICATIONS**

- ✓ Ethernet - 10/100/1000 Base T
- ✓ Cellular Phones
- ✓ Handheld Electronics
- ✓ FireWire
- ✓ USB Interface

IEC COMPATIBILITY (EN61000-4)

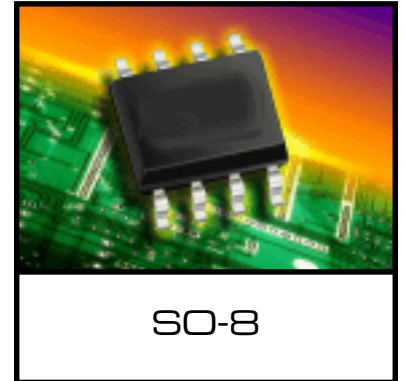
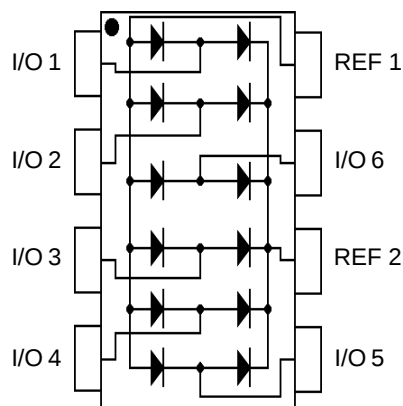
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 12A, 8/20 μ s - Level 1(Line-Gnd) & Level 2(Line-Line)

FEATURES

- ✓ ESD Protection > 40 kilovolts
- ✓ Low Clamping Voltage
- ✓ **LOW STANDBY CURRENT < 200nA**
- ✓ **ULTRA LOW CAPACITANCE 5pF PER DIODE**

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-8
- ✓ Weight 0.6 grams (Approximate)
- ✓ Flammability Rating UL 94V-0
- ✓ 12mm Tape and Reel Per EIA Standard 481
- ✓ Device Marking: Marking Code, Logo & Pin One Defined By DOT on Top of Package

**CIRCUIT DIAGRAM**

DEVICE CHARACTERISTICS

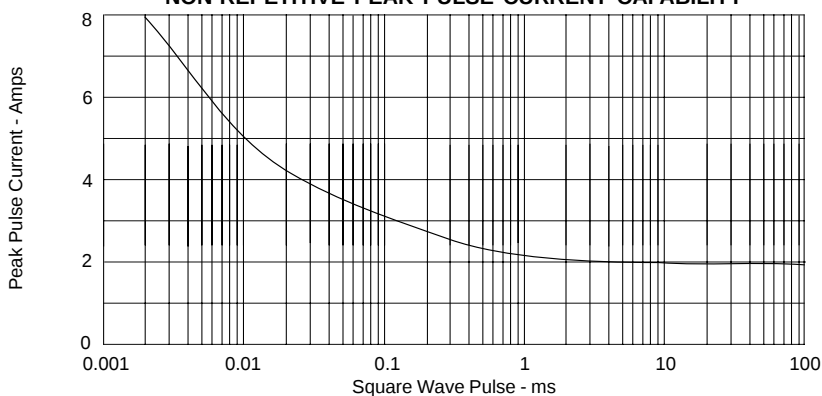
MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Operating Temperature	T_J	-55°C to 150°C	°C
Storage Temperature	T_{STG}	-55°C to 150°C	°C
Continuous Power Dissipation	P_{PC}	145	mW

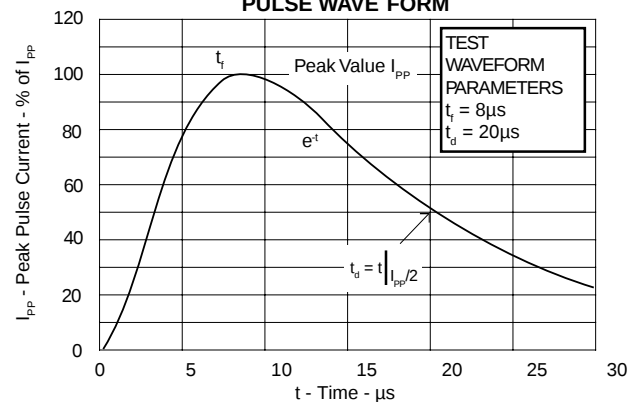
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	DEVICE MARKING	MAXIMUM OPERATING VOLTAGE	TYPICAL FORWARD VOLTAGE @50mA, 8/20μs	MAXIMUM FORWARD CURRENT 8/20μs	MAXIMUM LEAKAGE CURRENT @18V	MAXIMUM QUIESCENT SUPPLY CURRENT @20V	TYPICAL CAPACITANCE 0V @ 1 MHz
		V_{SUPPLY} VOLTS	V_F VOLTS	I_{FM} AMPS	I_N nA	I_{RQ} nA	C_j pF
DALC112S1	PSC	20	1.3	12	20	200	5

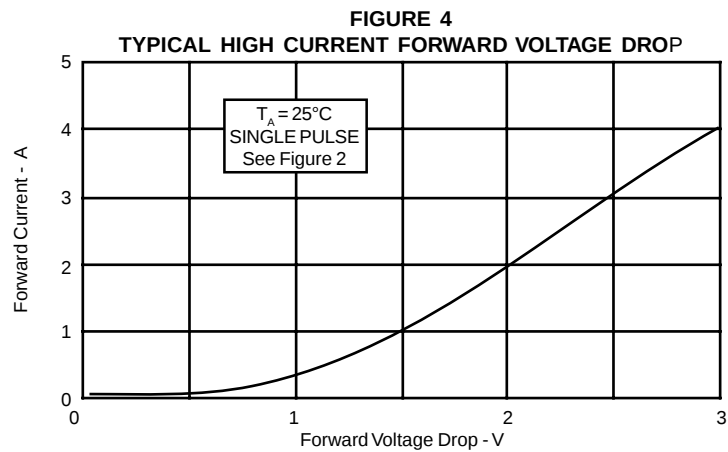
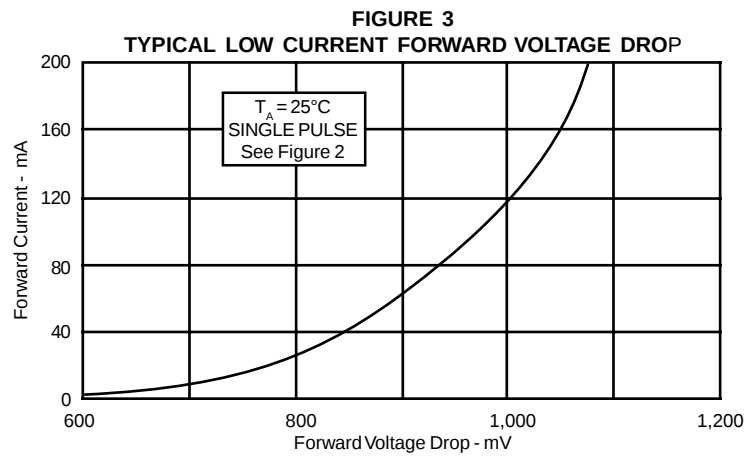
**FIGURE 1
NON-REPETITIVE PEAK PULSE CURRENT CAPABILITY**



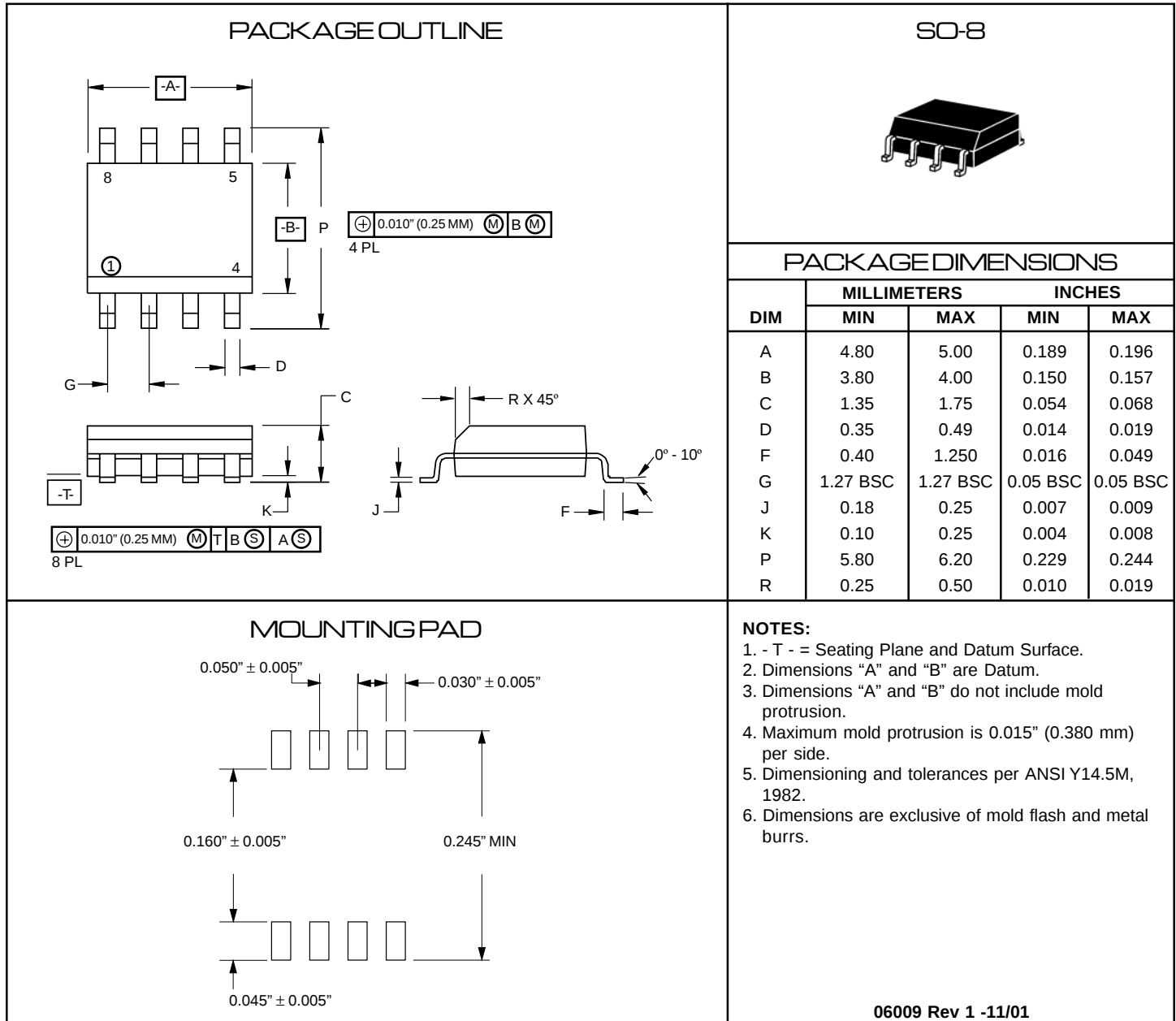
**FIGURE 2
PULSE WAVE FORM**



GRAPHS



PACKAGE OUTLINE & DIMENSIONS



PART NUMBER SUFFIXES USED FOR TAPE & REEL/BULK ORDERING:

Surface mount product is taped and reeled in accordance with EIA-481.
 Suffix-T7 = 7 Inch Reel - 1,000 pieces per reel i.e.: DALC112S1 -T7
 Suffix-T13 = 13 Inch Reel - 2,500 pieces per reel i.e.: DALC112S1 -T13
 No Suffix = Product Shipped in Tubes of 98 pcs per Tube

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