

UNCONTROLLED DOCUMENT

PART NUMBER
OED-CL0603C-14A

REV.

D

A	E.C.N. #10BRDR. & CHG'D POLARITY MARK.	5-14-99
B	E.C.N. #10532. CHG'D T&R ORIENTATION.	7-1-99
C	E.C.N. #10586. & #10BRDR.	1-27-00
D	E.C.N. #10946.	1.20.03

ELECTRO-OPTICAL CHARACTERISTICS $T_a=25^\circ\text{C}$

PARAMETER	MIN	TYP	MAX	UNITS	TEST UNITS
FORWARD VOLTAGE		1.6	1.8	V	$I_f=50\text{mA}$
REVERSE CURRENT			8.0	μA	$V_r=6\text{V}$
POWER OUTPUT	1.0		1.5	mW/sr	$I_f=20\text{mA}$
CAPACITANCE		30		pF	$f=1\text{MHz}$
BEAM HALF ANGLE		120		DEG.	
PEAK WAVELENGTH		860		nm	$I_f=20\text{mA}$
SPECTRAL BANDWIDTH		50		nm	$I_f=20\text{mA}$

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	1	mA
STEADY CURRENT	50	mA
POWER DISSIPATION	100	mW
DERATE FROM 25°C	-1.0	mW/ $^\circ\text{C}$
OPERATING TEMP.	-25 TO +85	$^\circ\text{C}$
STORAGE TEMP.	-30 TO +85	$^\circ\text{C}$

DUTY RATIO <1%, FREQUENCY = 1KHz

NOTES:

1. 2,000 PIECES PER REEL.
2. MOISTURE SENSITIVE LABEL ON REEL AND BAG.
3. ANTISTATIC HEATSEALED BAG.

CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.

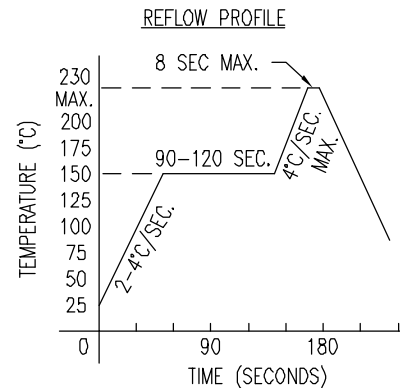
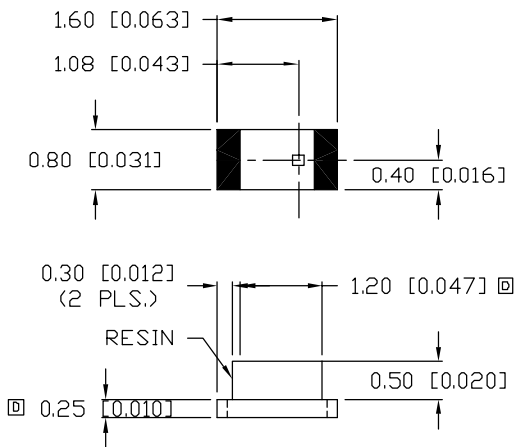
CAUTION: MOISTURE SENSITIVE DEVICE
1. SHELF LIFE IN SEALED BAG:
12 MONTHS AT $<40^\circ\text{C}$ AND $<90\%$ RELATIVE HUMIDITY (RH).
2. AFTER THIS BAG IS OPENED, DEVICES HAVE TO BE
MOUNTED WITHIN 48 HOURS OR STORED AT $<30\%$ RH.

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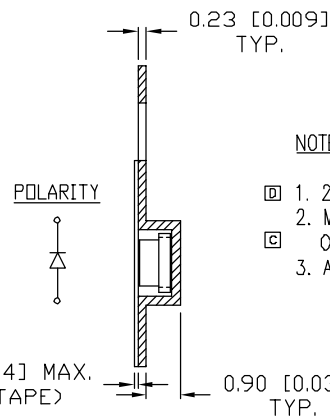
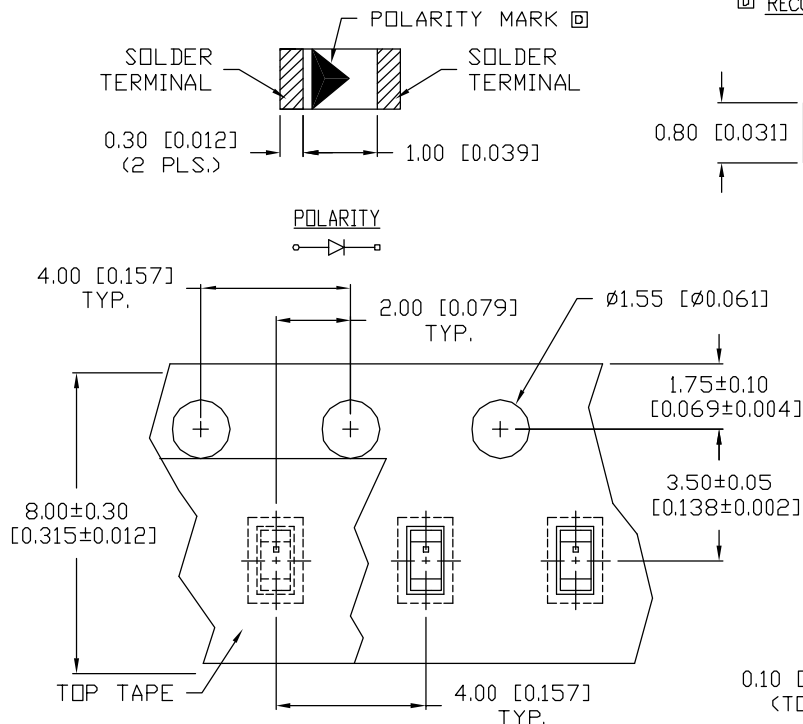
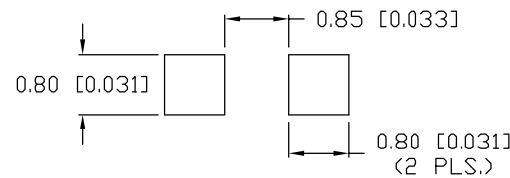


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DU			PAGE: 1 OF 1 SCALE: N/A



RECOMMENDED SOLDER PAD LAYOUT



*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (0.002), LEAD LENGTH=±0.75 (±0.030). MIN= $\begin{matrix} +\text{DECIMAL PRECISION} \\ -0.00 \end{matrix}$ MAX= $\begin{matrix} +0.00 \\ -\text{DECIMAL PRECISION} \end{matrix}$

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SMT IR EMITTER, 0603 PACKAGE,
14mil. x 14mil. DIE.

CONFIDENTIAL INFORMATION

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RELIABILITY NOTE

OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.