



We Tame Photons to Work for You!



Products > LEDs > Surface Mount > 2832 Package



Features / Options

- ▶ State-of-the-Art, High Brightness Chip Technology
- ▶ Choice of Colors and Lens Finishes
- ▶ Lead Frame / Lens Casting Reliability
- ▶ Easy-to-Solder Leads, Tin Finish
- ▶ Available Bulk or on Tape and Reel
- ▶ Lead Trimming and Forming Available
- ▶ Custom Shapes, Easily Tooled, Low Minimum

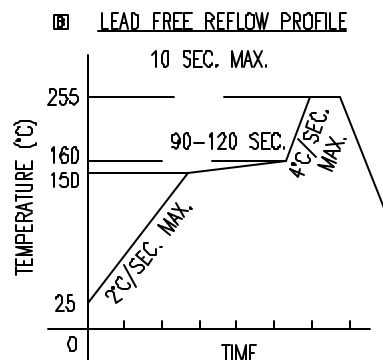
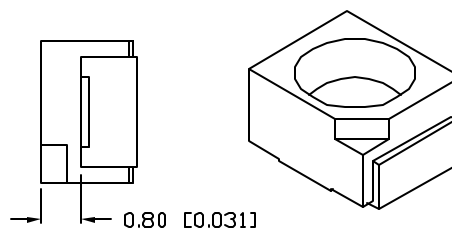
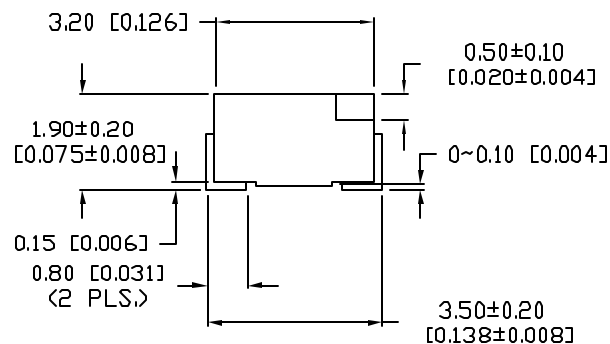
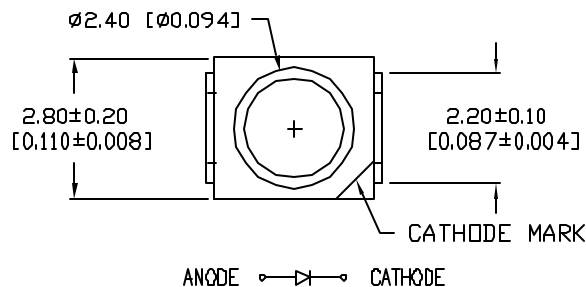
Applications / Uses

- ▶ Board or Panel Indication or Illumination
- ▶ Annunciator and Control Panels
- ▶ Telecom Switches and Central Station Equipment
- ▶ Large Panel Indicators

Part Number:		Brightness	Dice Material	Emitted Color	Peak Wavelength	Epoxy Lens	Operating Typ Vf (V)	Intensity Typ, mcd @ 20 mA	View Angle 2x Theta		
SML-LX2832DRC-TR		STANDARD	GaAlAs	Red	660	Clear	2.0	40	120		—
SML-LX2832GC-TR		STANDARD	GaP	Green	565	Clear	2.1	25	120		—
SML-LX2832GYC-TR		STANDARD	GaP	Green/Yellow	565	Clear	2.2/2.1	15	120		—
SML-LX2832IC-TR		STANDARD	GaAsP	Red	635	Clear	2	25	120		—
SML-LX2832IGC-TR		STANDARD	GaAsP / GaP	Red/Green	635	Clear	2.0/2.1	25	120		—
SML-LX2832IYC-TR		STANDARD	GaAsP / GaAsP	Red/Yellow	635	Clear	2.0/2.1	25	120		—
SML-LX2832LGC-TR		STANDARD	GaP	Green	565	Clear	2.1	25	120		—
SML-LX2832LIC-TR		STANDARD	GaAsP	Red	635	Clear	2.0	25	120		—
SML-LX2832LYC-TR		STANDARD	GaAsP	Yellow	585	Clear	2.1	15	120		—
SML-LX2832PGC-TR		STANDARD	GaP	Green	555	Clear	2.1	15	120		—

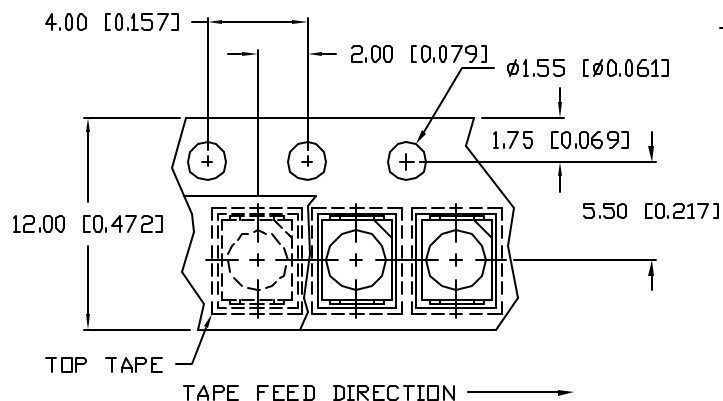
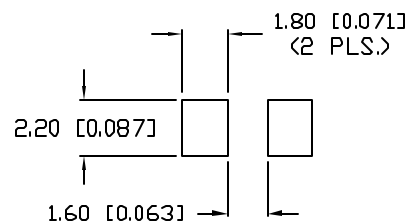
SML-LX2832SGC-TR		STANDARD	GaP	Green	565	Clear	2.1	28	120		—
SML-LX2832SIC-TR		HIGH	AlInGaP	Red	636	Clear	2.0	250	120		—
SML-LX2832SISUGCTR		HIGH	AlInGaP	Red/Green	636	Clear	2.0	60	120		—
SML-LX2832SISUGSBC		HIGH	AlInGaP	Red/Green	636	Clear	2.0/2.2/3.5	80	120		—
SML-LX2832SOC-TR		HIGH	AlInGaP	Orange	610	Clear	2.0	300	120		—
SML-LX2832SRC-TR		STANDARD	GaAlAsP	Red	660	Clear	1.8	100	120		—
SML-LX2832SRC/B-TR		STANDARD	GaAlAs	Red	660	Clear	1.7	65	120		—
SML-LX2832SRC/C-TR		STANDARD	GaAlAs	Red	660	Clear	1.7	100	120		—
SML-LX2832SRSGSBTR		STANDARD	GaAlAs / GaP / InGaN/SiC	RGB	660	Clear	1.8/2.2/3.5	110	120		—
SML-LX2832SRSUGUSB		STANDARD	GaAlAs	Red/Green	660	Clear	1.7/2.2/3.5	110	120		—
SML-LX2832SUGC-TR		HIGH	AlInGaP	Green	574	Clear	2.2	150	120		—
SML-LX2832SUGSICTR		HIGH	AlInGaP	Green/Red	574	Clear	2.0	25	120		—
SML-LX2832SYC-TR		HIGH	AlInGaP	Yellow	590	Clear	2.0	140	120		—
SML-LX2832SYSUGCTR		HIGH	AlInGaP	Yellow/Green	590	Clear	2.0	60	120		—
SML-LX2832UPGC-TR		HIGH	InGaN	Green	525	Clear	3.5	170	120		—
SML-LX2832USBC-TR		HIGH	InGaN	Blue	470	Clear	3.5	60	120		—
SML-LX2832UWC-TR		HIGH	InGaN	White	-	Clear	3.5	150	120		—
SML-LX2832YC-TR		STANDARD	GaAsP	Yellow	585	Clear	2.1	15	120		—
SML-LX2832YGC-TR		STANDARD	GaAsP / GaP	Yellow/Green	585	Clear	2.1	15	120		—
SML-LX2832ZIC-TR		HIGH	AlInGaP	Red	630	Clear	2.4	800	120		—

UNCONTROLLED DOCUMENT



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

RECOMMENDED SOLDER PAD LAYOUT



PART NUMBER		REV.
SML-LX2832SYC-TR		B
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10967.	3.14.03
B	E.C.N. #11148.	2.8.05

ELECTRO-OPTICAL CHARACTERISTICS $T_A=25^\circ\text{C}$ $I_f=20\text{mA}$

PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		590		nm	
FORWARD VOLTAGE		2.0	2.5	V_f	
REVERSE VOLTAGE	5.0			V_r	$I_r=100\mu\text{A}$
AXIAL INTENSITY		140		mcd	$I_f=20\text{mA}$
VIEWING ANGLE		120		2x theta	
EMITTED COLOR:	YELLOW				
EPOXY LENS FINISH:	WATER CLEAR				

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	160	mA
STEADY CURRENT	30	mA
POWER DISSIPATION	100	mW
DERATE FROM 25°C	-1.2	mW/°C
OPERATING TEMP.	-40 TO +85	°C
STORAGE TEMP.	-40 TO +85	°C

* $t < 10\mu\text{s}$

NOTES:

1. THE POLARITY MARK IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.

CAUTION: MOISTURE SENSITIVE DEVICE
PER JEDEC LEVEL 4 STANDARDS

UNCONTROLLED DOCUMENT

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

REV. B PART NUMBER SML-LX2832SYC-TR

2.8mm x 3.2mm SURFACE MOUNT LED WITH REFLECTOR,
590nm AlInGaP YELLOW LED, WATER CLEAR LENS,
1,500 PIECES PER TAPE AND REEL.

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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.



DRAWN BY: CT CHECKED BY: APPROVED BY: DATE: 11.26.01
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SCALE: N/A