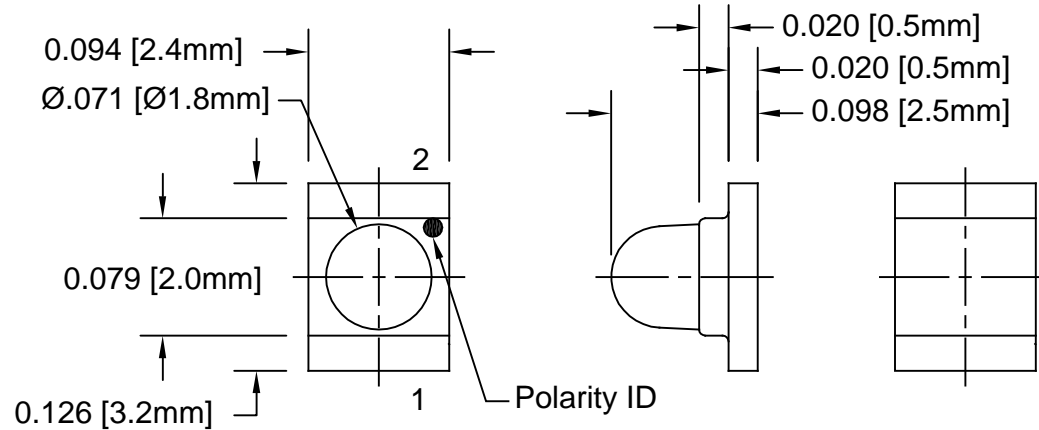


REV.	DESCRIPTION	DATE	APPROVED
C	Engineering Update w/o Changes	03/10/04	M. C.
D	Corrected Typos.	08/19/04	M. C.
E	Included Charts as Page 3, 4 & 5.	10/21/04	M. C.
F	Changed Storage & Operating Lower Temperature to -40.	11/02/04	M. C.
G	Image Orientation Update w/o Changes	02/28/05	M. C.
H	Added SM2-PGC-20 LED	09/29/06	M. C.

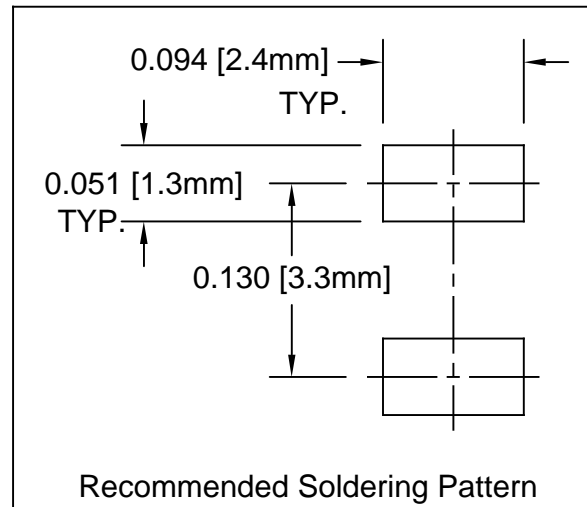


SM2-XXXX-20

*REVERSE POLARITY



SM2-XXXX-20



ABSOLUTE MAXIMUM RATINGS (Ta=25° C)

REVERSE VOLTAGE	_____	5V
REVERSE CURRENT	_____	100uA
OPERATING TEMPERATURE RANGE	_____	-40° C - 85° C
STORAGE TEMPERATURE	_____	-40° C - 100° C
LEAD SOLDERING TEMPERATURE(1/16" FROM BODY)	_____	260° C FOR 5 SECONDS

STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED)	
DECIMALS	ANGULAR
.X ± .1	X° ± 1°
.XX ± .02	
.XXX ± .010	
DESIGNED: David Green	DATE: 10/21/02
CHECKED: M. Chen	DATE: 10/21/02

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TITLE: SURFACE MOUNT LED,
1.8mm DOMED LENS

PART NO: SM2-XXXX-20 **REVISION:** H



CAGE CODE : 32559 **SHEET #** 1 **OF** 6

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REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET#1.		

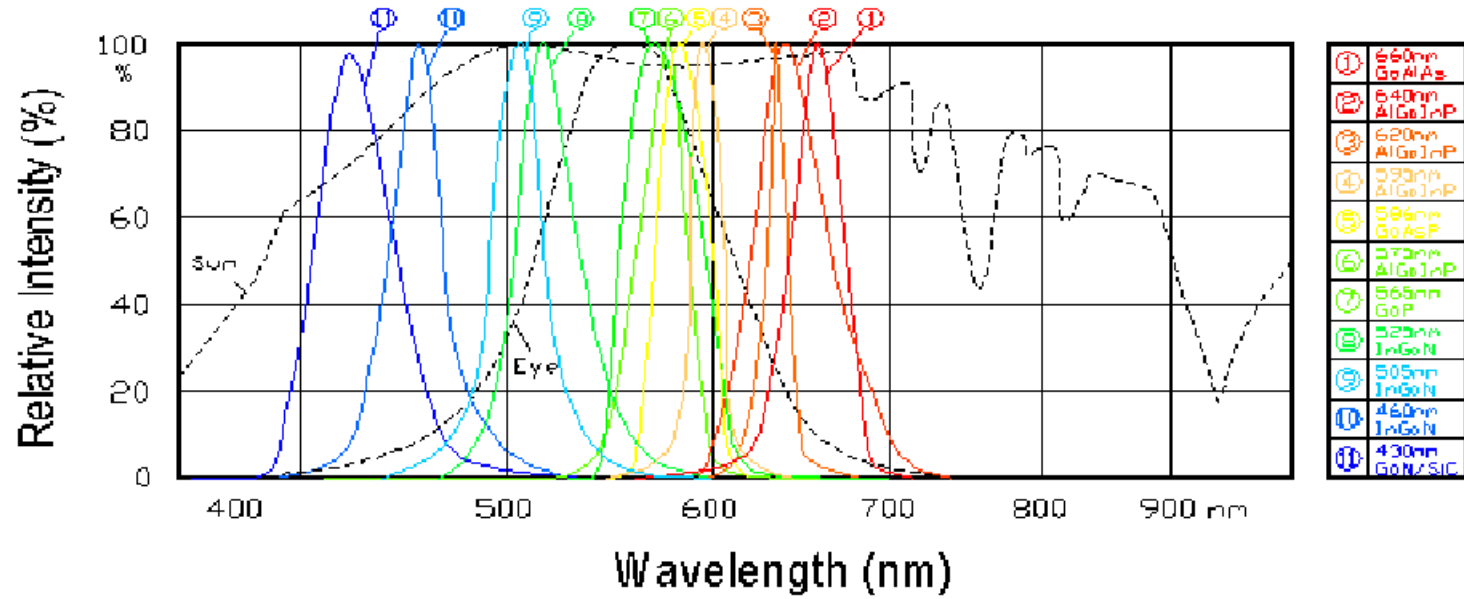
LED Part No.	Chip			Lens Appearance	Absolute Max. Ratings				Electro-Optical Data @ 20mA			Viewing Angle 2θ ½ (Deg)
	Material	Peak Wave Length λp(nm)	Emitted Color		Δλ (nm)	Pd (mW)	If (mA)	Peak If(mA)	Vf (V)		Iv (mcd)	
									TYP	MAX	TYP	
SM2-SBWC-20	GaN/Sic	430	SUPER BLUE	WATER CLEAR	60	150	30	150	4.0	4.5	64	20
SM2-UBWC-20	GaN	460	ULTRA BLUE	WATER CLEAR	68	150	30	150	3.4	4.0	288	20
SM2-UTC-20	InGaN	505	ULTRA TURQUOISE	WATER CLEAR	37	150	30	150	3.3	4.0	960	20
SM2-PGC-20	InGaN/SiC	510	GREEN	WATER CLEAR	20	120	30	125	3.5	4.0	900	20
SM2-UGC-20	InGaN	525	ULTRA GREEN	WATER CLEAR	40	150	30	150	3.2	3.8	960	20
SM2-GC-20	GaP	565	GREEN	WATER CLEAR	32	100	30	150	2.3	2.7	136	20
SM2-SGC-20	AlGaN	575	GREEN	WATER CLEAR	18	100	30	150	2.1	2.6	296	20
SM2-YC-20	GaAsP	586	YELLOW	WATER CLEAR	37	100	30	150	2.1	2.5	49	20
SM2-UYC-20	AlGaN	595	YELLOW	WATER CLEAR	32	100	30	150	2.0	2.5	456	20
SM2-UAC-20	AlGaN	600	AMBER	WATER CLEAR	20	100	30	150	1.9	2.4	600	20
SM2-SAC-20	AlGaN	610	AMBER	WATER CLEAR	25	100	30	150	1.9	2.4	416	20
SM2-UOC-20	AlGaN	620	ORANGE	WATER CLEAR	18	100	30	150	1.9	2.4	600	20
SM2-UHC-20	AlGaN	635	HE RED	WATER CLEAR	25	100	30	150	1.9	2.4	536	20
SM2-SHC-20	AlGaN	640	RED	WATER CLEAR	23	80	30	150	1.9	2.4	416	20
SM2-ERC-20*	GaAlAs	660	RED	WATER CLEAR	25	80	30	150	1.8	2.3	152	20
SM2-UWC-20	GaN	X=.29 Y=.30	WHITE	WATER CLEAR	-	150	30	150	3.4	4.0	250	60

*ERC CHIP REVERSED POLARITY


STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED) ±10% ALL VALUES ANGULAR X° ± 5°		 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
			
DESIGNED: David Green	DATE: 10/21/02	PART NO: SM2-XXXX-20	REVISION: H
CHECKED: M. Chen	DATE: 10/21/02		CAGE CODE : 32559 SHEET # 2 OF 6
CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.			

REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET#1.		

Relative Intensity vs. Wavelength



①	660nm GaAlAs
②	640nm AlGaInP
③	620nm AlGaInP
④	595nm AlGaInP
⑤	585nm GaAsP
⑥	570nm AlGaInP
⑦	565nm GaP
⑧	525nm InGaN
⑨	505nm InGaN
⑩	480nm InGaN
⑪	430nm GaN/SiC

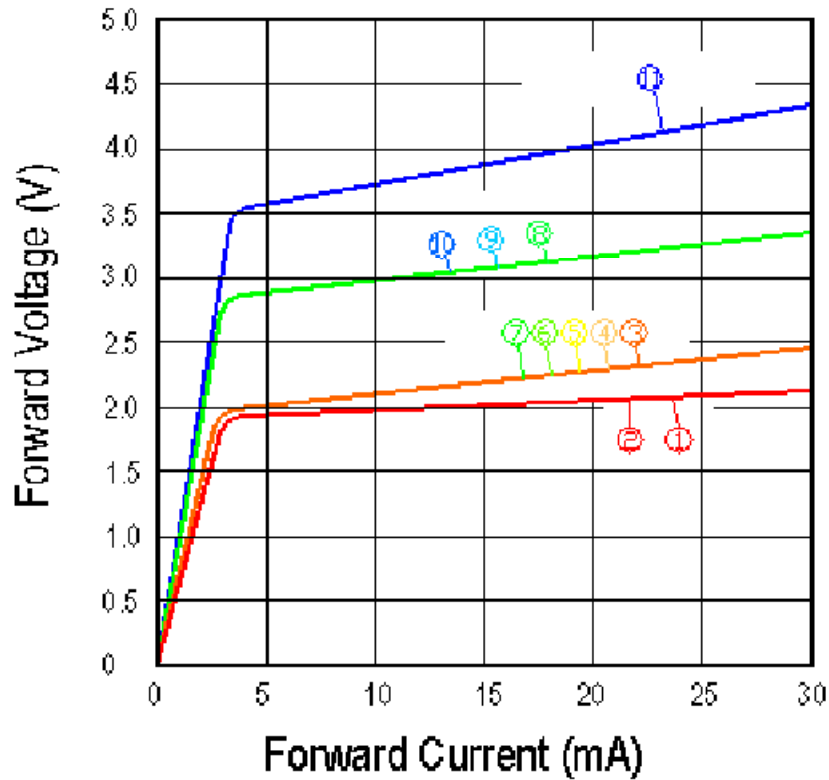
STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED) ±10% ALL VALUES		 TITLE: SURFACE MOUNT LED, 1.8mm DOMED LENS	
ANGULAR X° ± 5°			
DESIGNED: David Green	DATE: 10/21/02	PART NO: SM2-XXXX-20	REVISION: H
CHECKED: M. Chen	DATE: 10/21/02	CAGE CODE : 32559	SHEET # 3 OF 6
CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.			

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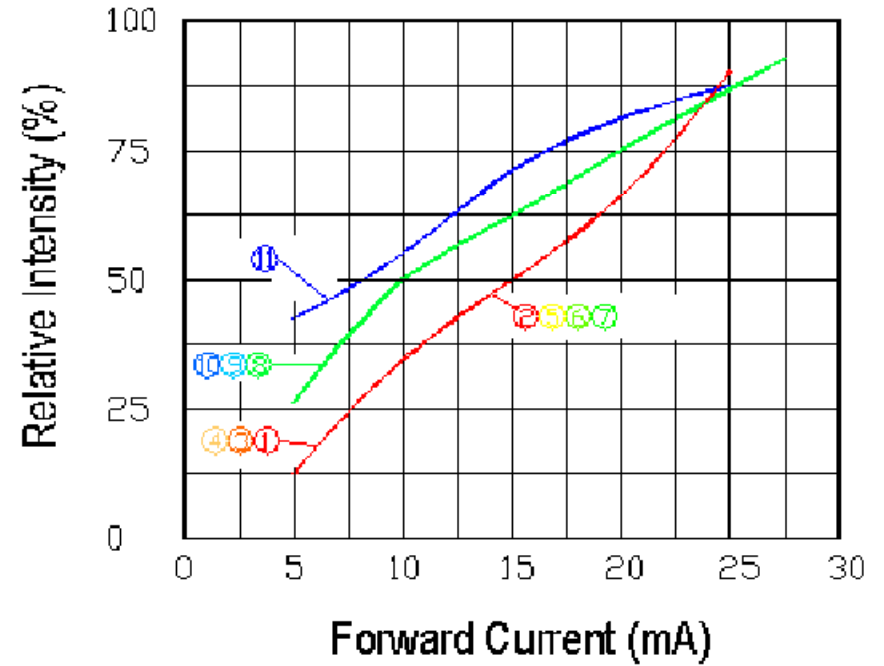
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REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET#1.		

Forward Voltage vs. Forward Current

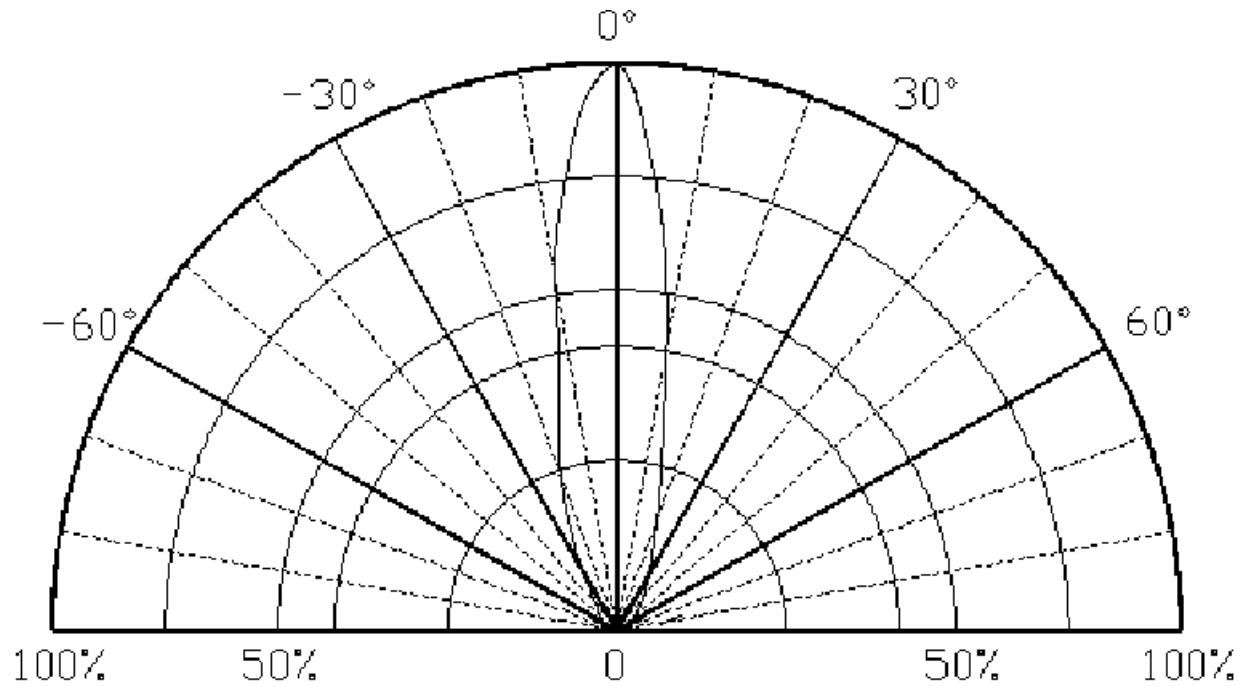


Relative Intensity vs. Forward Current




STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED) ±10% ALL VALUES ANGULAR X° ± 5°		 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
			
DESIGNED: David Green	DATE: 10/21/02	PART NO: SM2-XXXX-20	REVISION: H
CHECKED: M. Chen	DATE: 10/21/02		CAGE CODE : 32559 SHEET # 4 OF 6
CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.			

REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET#1.		



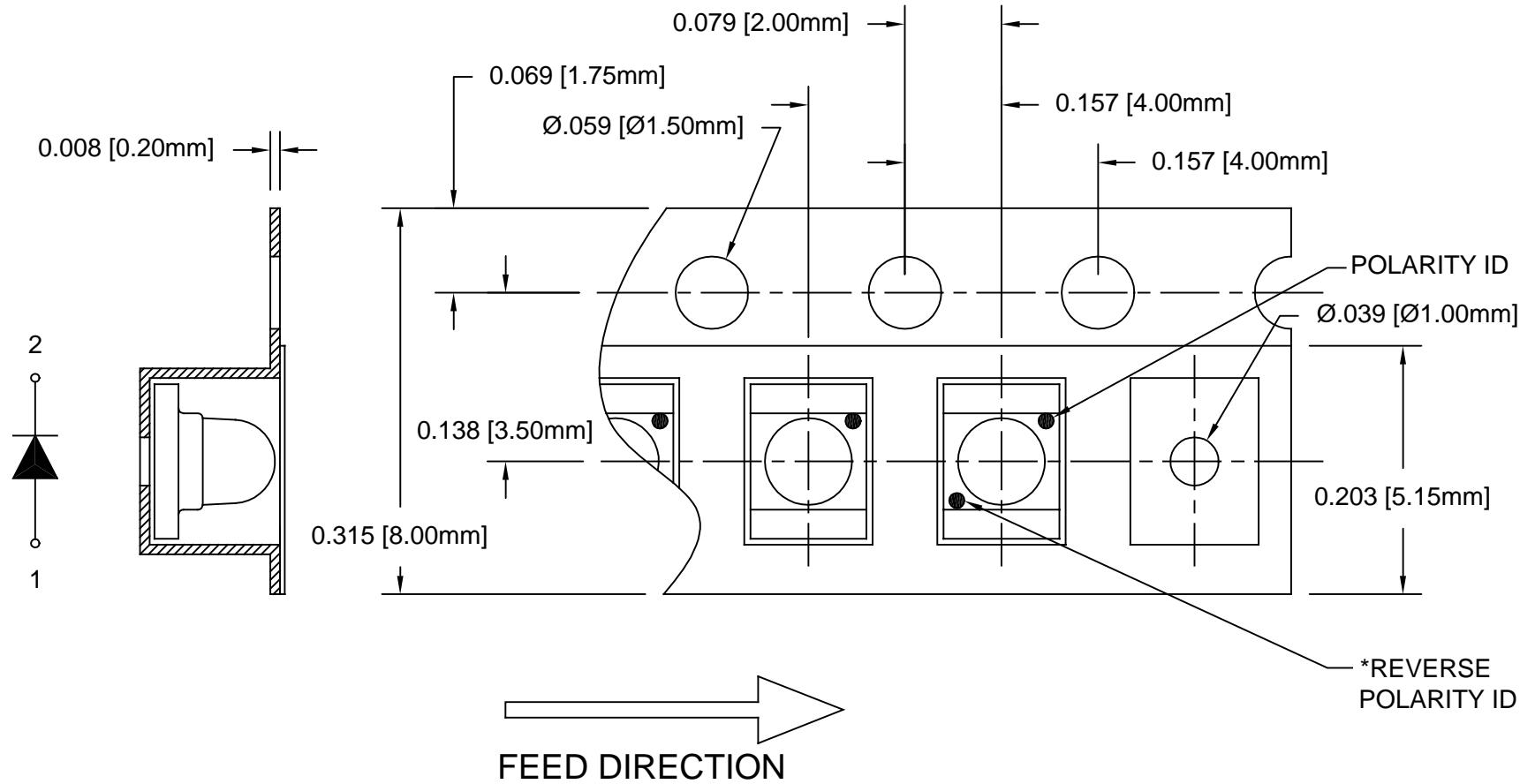
Directive Characteristics

STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED) ±10% ALL VALUES		ANGULAR X° ± 5°	
		TITLE: SURFACE MOUNT LED, 1.8mm DOMED LENS	
		DESIGNED: David Green	DATE: 10/21/02
CHECKED: M. Chen	DATE: 10/21/02	CAGE CODE : 32559	SHEET # 5 OF 6
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
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REV.	DESCRIPTION	DATE	APPROVED
	See Sheet #1.		



2. UNLESS OTHERWISE SPECIFIED,
PACKAGING TO COMPLY WITH EIA-481
1. 1500 pcs PER REEL

STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED)		 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
DECIMALS	ANGULAR		
.X ±.1	X° ± 1°	 TITLE: SURFACE MOUNT LED, 1.8mm DOMED LENS	
.XX ±.02			
.XXX ±.010			
DESIGNED: David Green	DATE: 10/21/02	PART NO: SM2-XXXX-20	REVISION: H
CHECKED: M. Chen	DATE: 10/21/02	CAGE CODE : 32559	SHEET # 6 OF 6
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