

STANLEY**STANLEY
SUPER BRIGHT
LED LAMP**

T-41-23

**DEBESO(CHIMNEY) TYPE
φ2.1 TYPE****2511DEB****2531DEB****SERIES****SELECTION GUIDE**

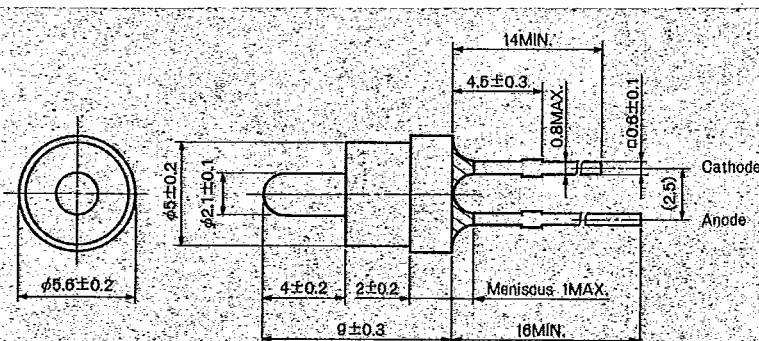
COLOR	MATERIAL	PART NUMBER
Red	GaAlAs	SBR 2511DEB, 2531DEB
	GaAsP	SAR 2511DEB, 2531DEB
	GaP	SPR 2511DEB, 2531DEB
Green	GaP	SBG 2511DEB, 2531DEB
	GaP	SPG 2531DEB
Yellow	GaAsP/GaP	SAY 2511DEB, 2531DEB
Orange	GaAsP/GaP	SAO 2511DEB, 2531DEB

FEATURES

- AVAILABLE IN 4 COLORS; RED, GREEN, YELLOW AND ORANGE
- STEPPED CYLINDRICAL TYPE, DIAMETER 2.1mm HEMISPHERIC LIGHT EMITTING SURFACE
- DIFFUSED TYPE
- MOST SUITABLE FOR LEVEL INDICATOR
- LOW CURRENT DRIVE, DIRECTLY COMPATIBLE WITH IC
- QUICK RESPONSE, ALLOWING PULSED OPERATION
- HIGH RELIABILITY

DESCRIPTION

DEBESO type LEDs can be most effectively used when applied to audio panel use. The materials of chip used are GaAsP GaP and GaAsP/GaP, having special patterns and excellent in light emitting direction.

Package Dimensions—Unit in mm

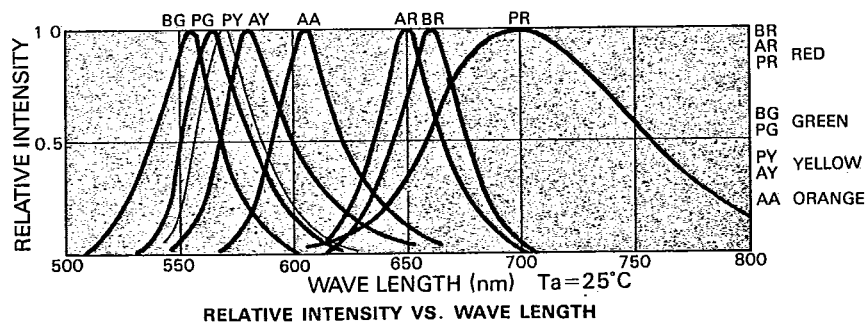
Absolute Maximum Ratings (Ta=25°C)

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Parameter	Symbol	Red			Green		Yellow		Orange	Units
		BR	AR	PR	BG	PG	PY	AY	AA	
Forward Current	I_F	50	50	30	50	50		50	50	mA
Peak Forward Current	I_{FM}	300	300	100	100	100		100	100	mA
Reverse Voltage	V_R	4			4		4		4	V
Power Dissipation	P_d	100	100	75	125	125		125	125	mW
Operating Temperature	T_{opr}	-30~+ 85			-30~+ 85		-30~+ 85		-30~+85	°C
Storage Temperature	T_{stg}	-30~+100			-30~+100		-30~+100		-30~+100	°C
Lead Soldering Temperature		260°C for 5 seconds (3.0mm from body)								

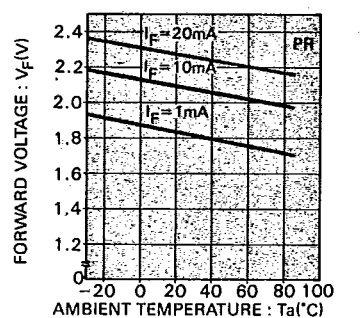
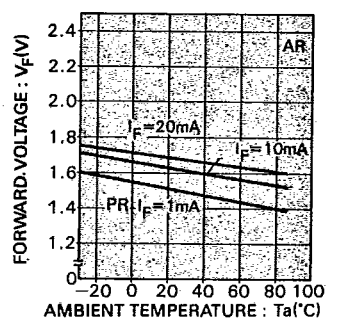
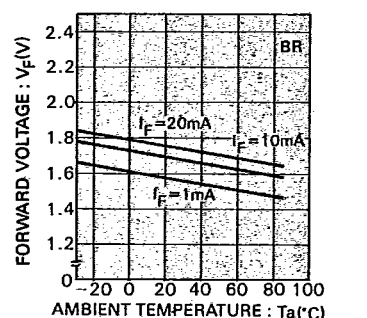
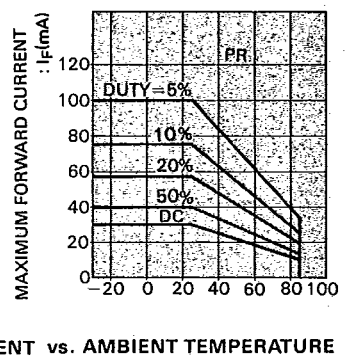
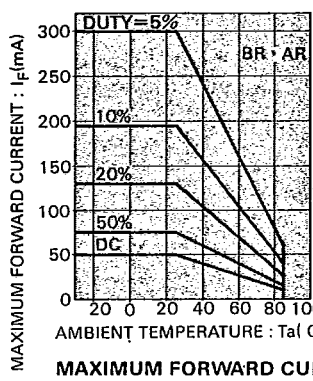
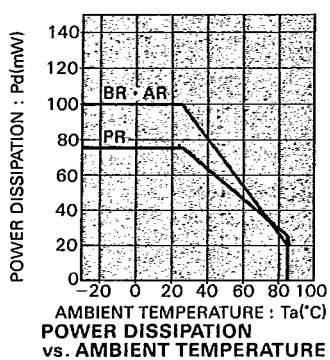
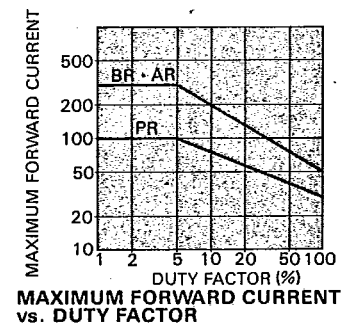
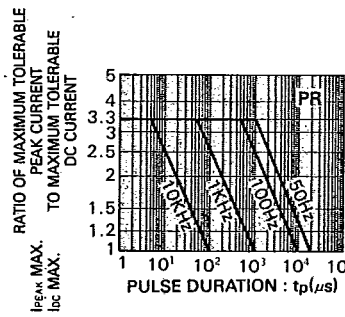
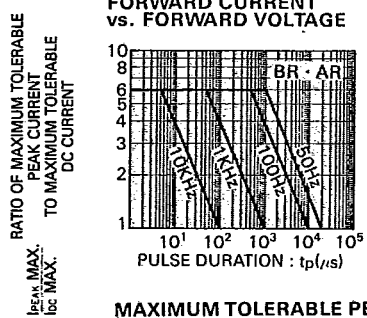
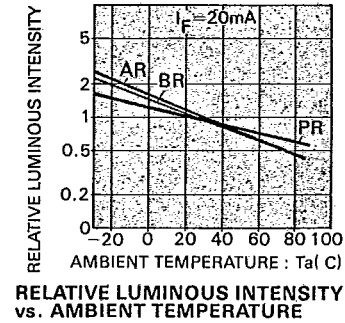
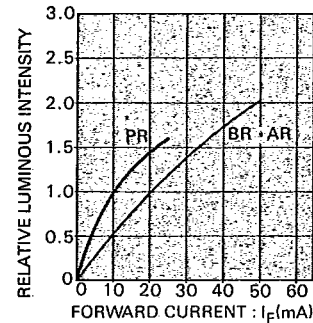
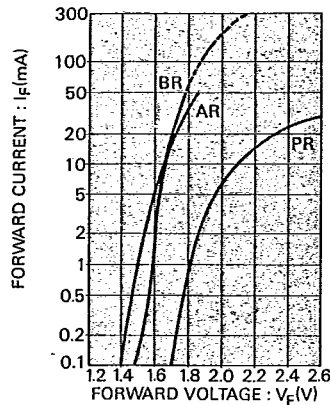
Electro-Optical Characteristics (Ta=25°C)

Type No.	Chip		Lens	Iv(mcd)		at I_F (mA)	Peak Wave Length λ_p (nm)	Spectral Line Half Width $\Delta\lambda$ (nm)	V_F (V)		at I_F (mA)	at $V_R=4V$ $I_R(\mu A)$	Capacitance Co(pF)
	Material	Emitted Color		Min.	Typ.				Typ.	Max.			
SBR2531DEB(11DEB)	GaAlAs	Red	C.D (W.D)	1.5	3.0	20	660	30	1.7	2.0	20	100	50
SAR2531DEB(11DEB)	GaAsP	Red	C.D (W.D)	0.5	1.0	20	650	30	1.7	2.0	20	100	40
SPR2531DEB(11DEB)	GaP	Red	C.D (W.D)	0.5	1.0	10	700	100	2.1	2.5	10	100	70
SBG2531DEB(11DEB)	GaP	Green	C.D (W.D)	1.0	2.0	20	555	30	2.1	2.5	20	100	50
SPG2531DEB	GaP	Green	C.D	2.0	4.0	20	565	30	2.1	2.5	20	100	40
SAY2531DEB(11DEB)	GaAsP/GaP	Yellow	C.D (W.D)	1.5	3.0	20	580	30	2.2	2.5	20	100	40
SAA2531DEB(11DEB)	GaAsP/GaP	Orange	C.D (W.D)	1.5	3.0	20	605	30	2.2	2.5	20	100	50



RED

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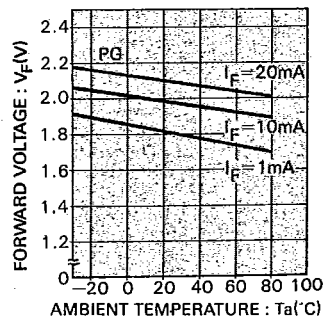
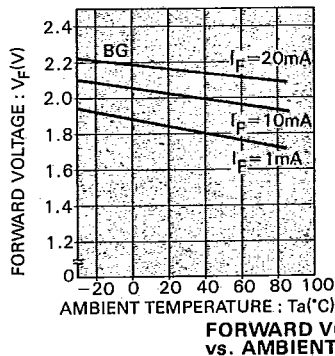
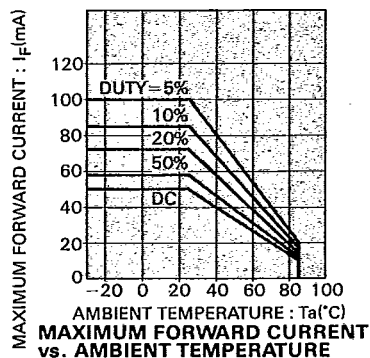
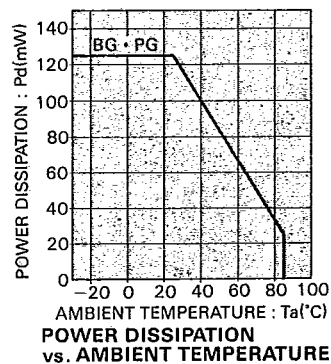
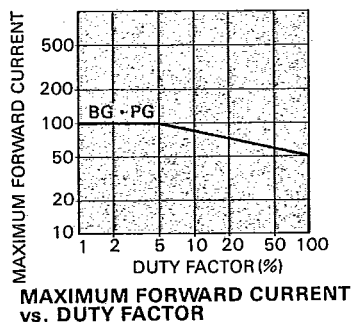
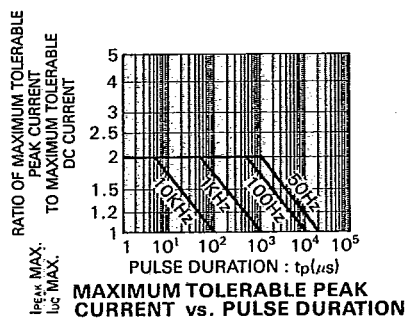
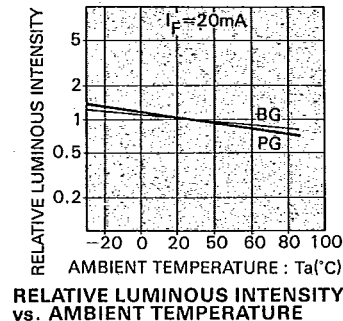
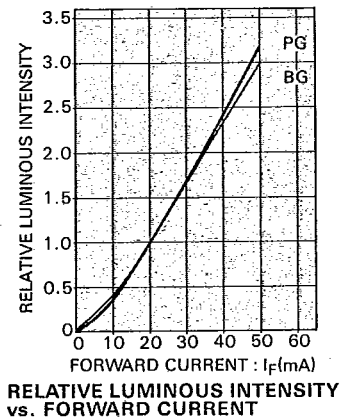
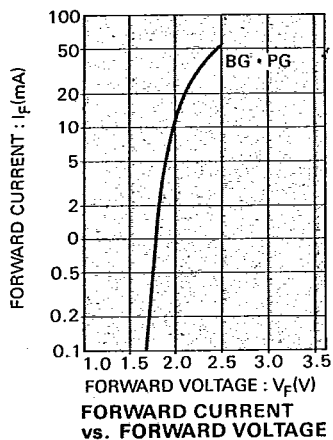


FORWARD VOLTAGE vs. AMBIENT TEMPERATURE

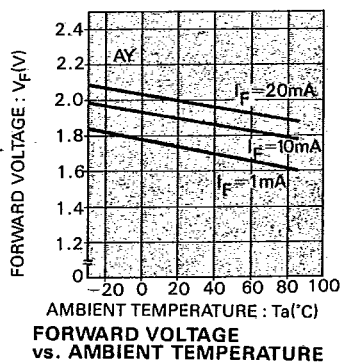
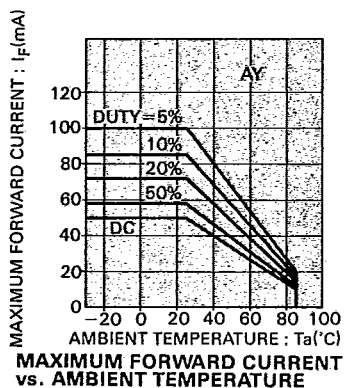
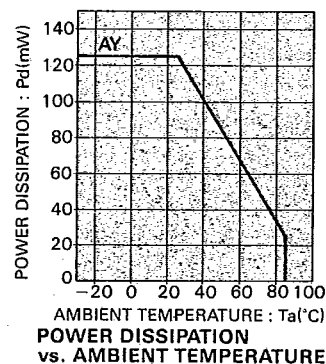
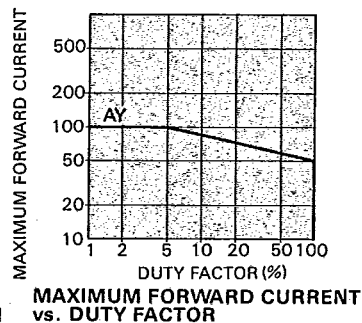
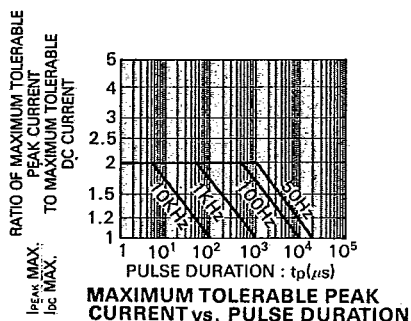
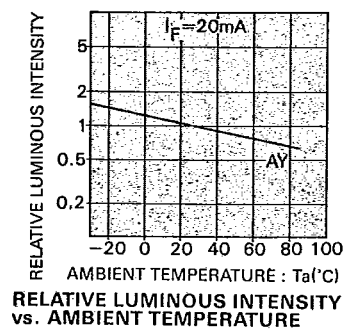
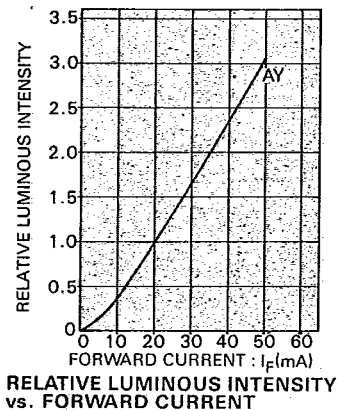
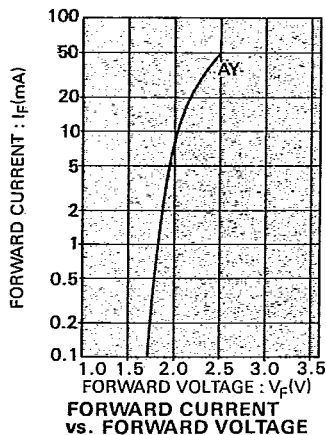


GREEN

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YELLOW

LED LAMP

ORANGE

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