SUPER BRIGHT LED LAMP

ROUND SHAPE TYPE
ϕ3 (T-1 3/4)

5504S/5514S/5524S/5534S/5704S/5714S/5724S/5734S SERIES

■ FEATURES

- AVAILABLE IN 4 COLORS; RED, GREEN, YELLOW AND ORANGE
- ALL RESIN MOLDED PACKAGE
- AVAILABLE IN WIDE VIEWING AND NARROW VIEWING ANGLES
- LOW CURRENT DRIVE
- LARGE ALLOWABLE CURRENT CAPACITY, EXCELLENT FOR PULSE DRIVE
- HIGH RELIABILITY, LONG LIFE

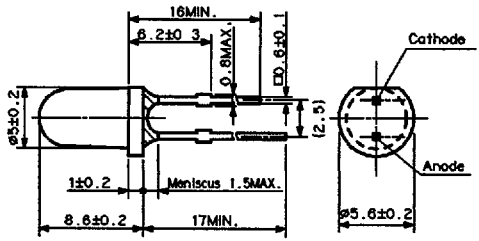
■ APPLICATION

- LIGHT SOURCE FOR OA EQUIPMENT
- LIGHT SOURCE FOR AV EQUIPMENT
- LIGHT SOURCE FOR ILLUMINATED SWITCH

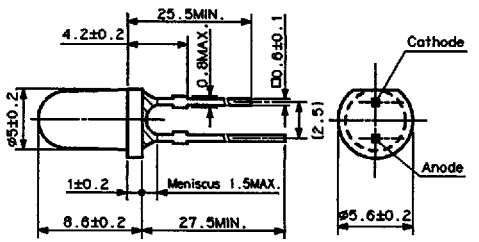
■ Package Dimension

Unit in mm

55□4



57□4



■ Absolute Maximum Ratings

(Ta=25°C)

Parameter	Symbol	Red			Green		Yellow		Orange	Units
		BR	AR	PR	BG	PG(Y)	PY	AY	AA	
Forward Current	I_F	50	50	30	50	50	50	50	50	mA
Peak Forward Current	I_{FM}	300	300	100	100	100	100	100	100	mA
Reverse Voltage	V_R	4			4		4		4	V
Power Dissipation	Pd	100	100	75	125	125	125	125	125	mW
Operating Temperature	Topr	−30～+85			−30～+85		−30～+85		−30～+85	°C
Storage Temperature	Tstg	−30～+100			−30～+100		−30～+100		−30～+100	°C

* The current derating for operation above 25°C is 0.67mA/°C for BR/BG/PG/PY/AY/AA, 0.40mA/°C for MVR/MPR/MPY/MAY and 0.33mA/°C for VR/PR/MBG/MPG/MAA.

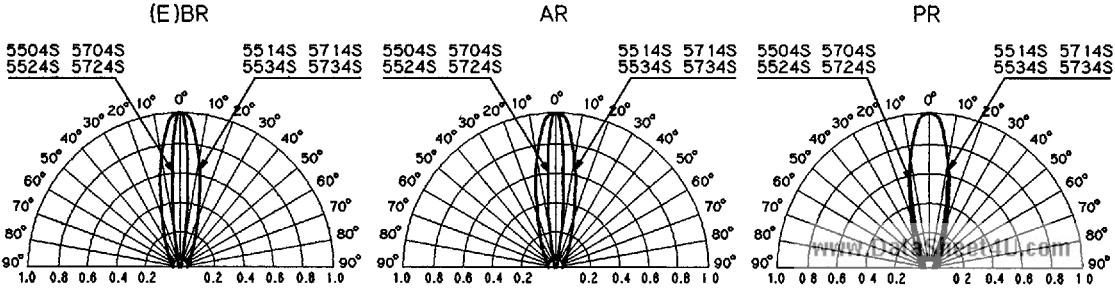
Electro-Optical Characteristics

(Ta=25°C)

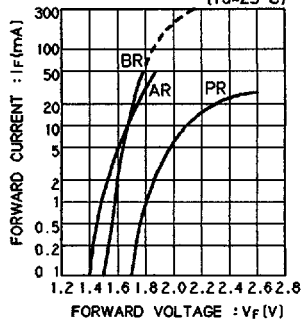
Type No.	Chip		Lens *	Iv(mcd)		at IF (mA)	Peak Wave Length λp(nm)	Spectral Line Half Width Δλ(nm)	VF(V)		at IF (mA)	at VR4V IR(μA)	Capacitance Co(pF)
	Material	Emitted Color		Min.	Typ.				Typ.	Max.			
BR5504S (24S)	GaAlAs	Red	W.C (C.C)	40.0	80.0	20	660	30	1.7	2.0	20	100	50
BR5534S (14S)	GaAlAs	Red	C.D (W.D)	8.0	20.0	20	660	30	1.7	2.0	20	100	50
EBR5504S (24S)	GaAlAs	Red	W.C (C.C)	80.0	160.0	20	660	30	1.7	2.0	20	100	50
EBR5534S (14S)	GaAlAs	Red	C.D (W.D)	20.0	30.0	20	660	30	1.7	2.0	20	100	50
AR5504S (24S)	GaAsP	Red	W.C (C.C)	3.0	6.0	20	650	30	1.7	2.0	20	100	40
AR5534S (14S)	GaAsP	Red	C.D (W.D)	1.5	3.0	20	650	30	1.7	2.0	20	100	40
PR5504S (24S)	GaP	Red	W.C (C.C)	6.0	12.0	10	700	100	2.1	2.5	10	100	70
PR5534S (14S)	GaP	Red	C.D (W.D)	3.0	6.0	10	700	100	2.1	2.5	10	100	70
BG5504S (24S)	GaP	Pure Green	W.C (C.C)	20.0	40.0	20	555	30	2.1	2.5	20	100	50
BG5534S (14S)	GaP	Pure Green	C.D (W.D)	5.0	8.0	20	555	30	2.1	2.5	20	100	50
EBG5504S (24S)	GaP	Pure Green	W.C (C.C)	50.0	80.0	20	555	30	2.1	2.5	20	100	50
EBG5534S (14S)	GaP	Pure Green	C.D (W.D)	8.0	12.0	20	555	30	2.1	2.5	20	100	50
PG5524SY	GaP	Green	C.C	30.0	60.0	20	565	30	2.1	2.5	20	100	40
PG5534SY	GaP	Green	C.D	12.0	24.0	20	565	30	2.1	2.5	20	100	40
PY5504S (24S)	GaP	Yellow	W.C (C.C)	40.0	80.0	20	570	30	2.1	2.5	20	100	40
PY5534S (14S)	GaP	Yellow	C.D (W.D)	15.0	30.0	20	570	30	2.1	2.5	20	100	40
EPY5504S (24S)	GaP	Yellow	W.C (C.C)	80.0	160.0	20	570	30	2.1	2.5	20	100	40
EPY5534S (14S)	GaP	Yellow	C.D (W.D)	30.0	45.0	20	570	30	2.1	2.5	20	100	40
AY5504S (24S)	GaAsP/GaP	Yellow	W.C (C.C)	30.0	60.0	20	580	30	2.2	2.5	20	100	40
AY5534S (14S)	GaAsP/GaP	Yellow	C.D (W.D)	8.0	16.0	20	580	30	2.2	2.5	20	100	40
EAY5504S (24S)	GaAsP/GaP	Yellow	W.C (C.C)	60.0	90.0	20	580	30	2.2	2.5	20	100	40
EAY5534S (14S)	GaAsP/GaP	Yellow	C.D (W.D)	16.0	24.0	20	580	30	2.2	2.5	20	100	40
AA5504S (24S)	GaAsP/GaP	Orange	W.C (C.C)	30.0	60.0	20	605	30	2.2	2.5	20	100	50
AA5534S (14S)	GaAsP/GaP	Orange	C.D (W.D)	8.0	16.0	20	605	30	2.2	2.5	20	100	50
EAA5504S (24S)	GaAsP/Gap	Orange	W.C (C.C)	60.0	90.0	20	605	30	2.2	2.5	20	100	50
EAA5543S (14S)	GaAsP/GaP	Orange	C.D (W.D)	16.0	24.0	20	605	30	2.2	2.5	20	100	50

* W.C =Water Clear
W.D =Water Diffused
C.C =Color Clear
C.D =Color Diffused
W.S.D =White Surface Diffused
C.S.D =Color Surface Diffused
P.C =Pastel Color
P.D =Pastel Diffused
P.S.D =Pastel Surface Diffused

■ SPATIAL DISTRIBUTION



■FORWARD CURRENT vs. FORWARD VOLTAGE



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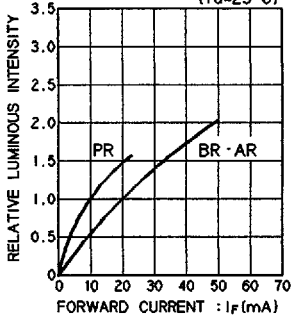
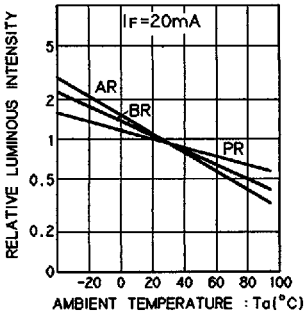
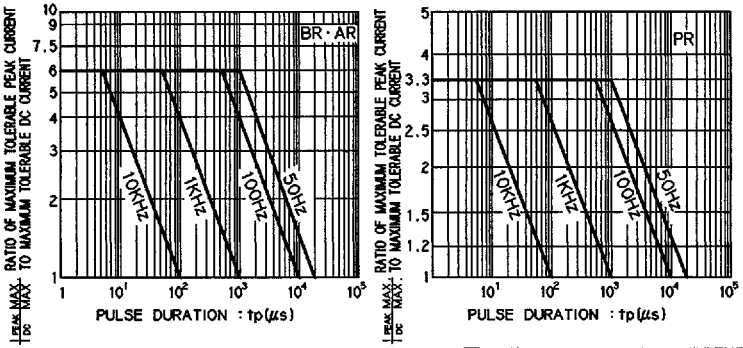


■RELATIVE LUMINOUS INTENSITY vs. AMBIENT TEMPERATURE



■MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



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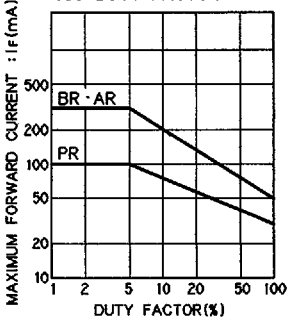

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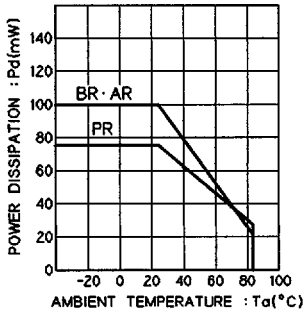

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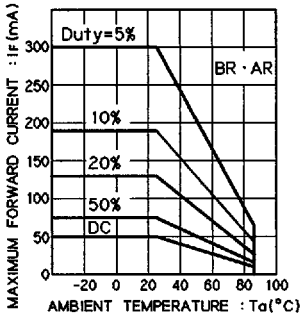

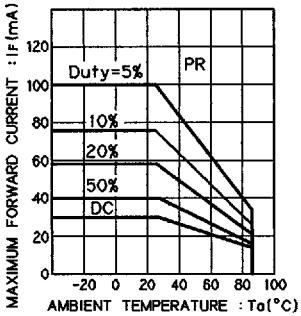

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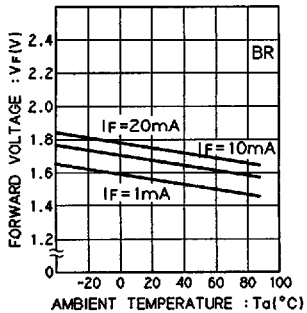
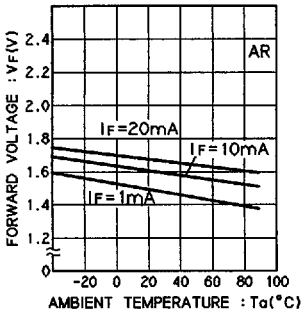
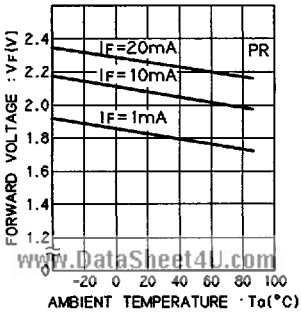
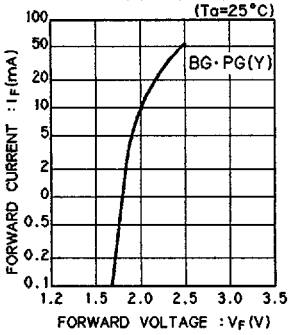


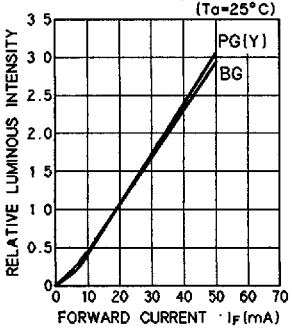




■FORWARD CURRENT vs. FORWARD VOLTAGE



■RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT



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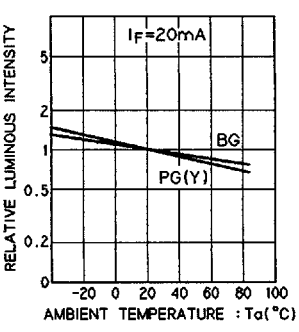
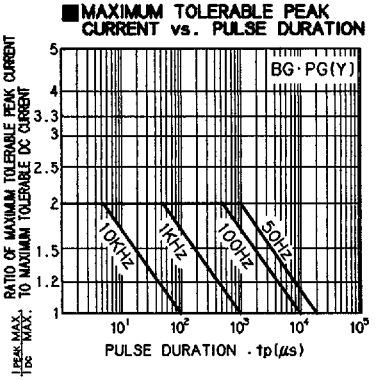
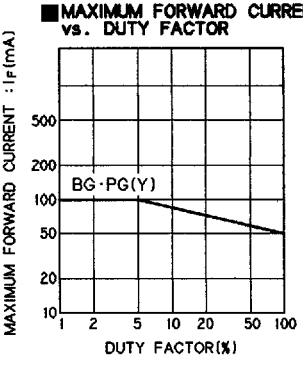


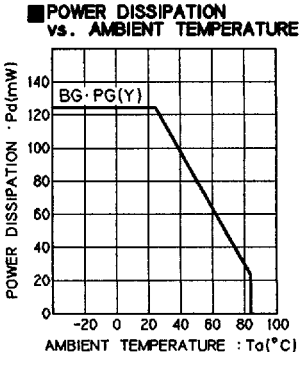
■MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



■MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



■POWER DISSIPATION vs. AMBIENT TEMPERATURE



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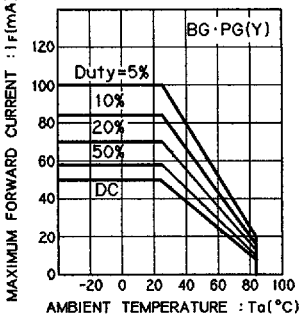
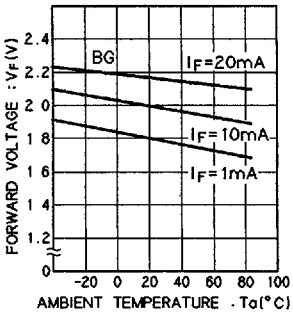
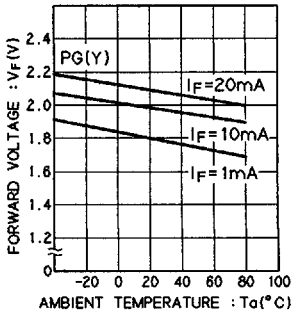


■FORWARD VOLTAGE vs. AMBIENT TEMPERATURE





■SPATIAL DISTRIBUTION

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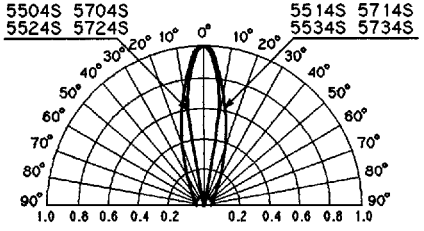

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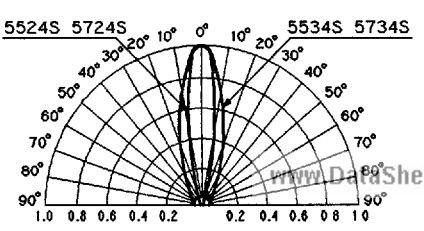
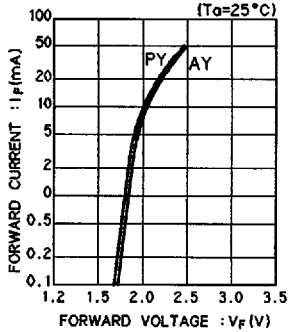
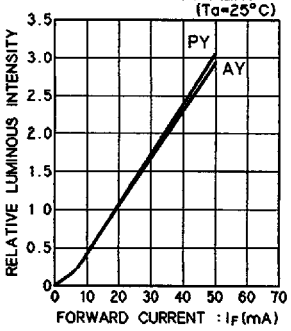


■ YELLOW

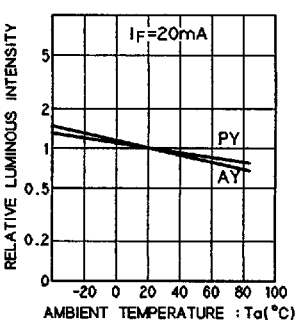
■ FORWARD CURRENT vs. FORWARD VOLTAGE (Ta=25°C)



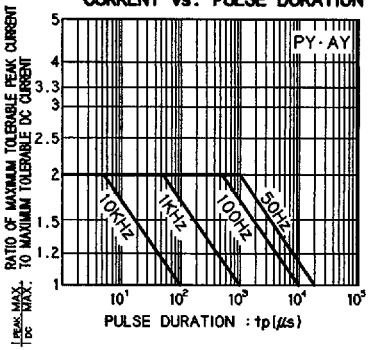
■ RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT (Ta=25°C)



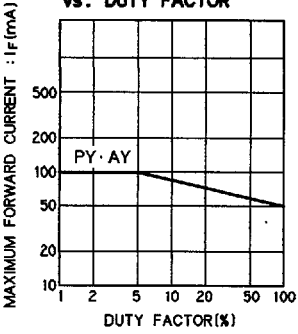
■ RELATIVE LUMINOUS INTENSITY vs. AMBIENT TEMPERATURE



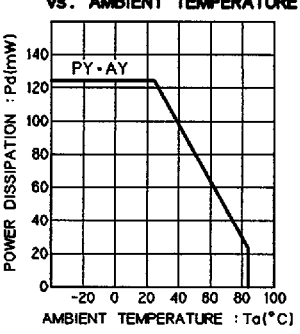
■ MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



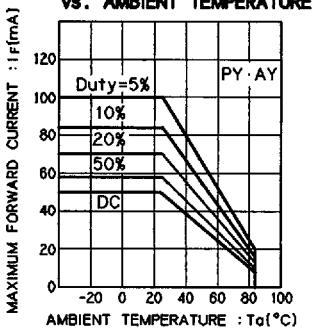
■ MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



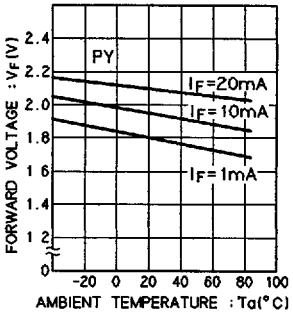
■ POWER DISSIPATION vs. AMBIENT TEMPERATURE

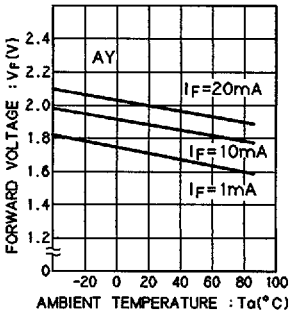


■ MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



■ FORWARD VOLTAGE vs. AMBIENT TEMPERATURE





■ SPATIAL DISTRIBUTION

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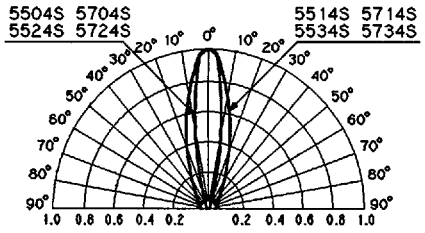

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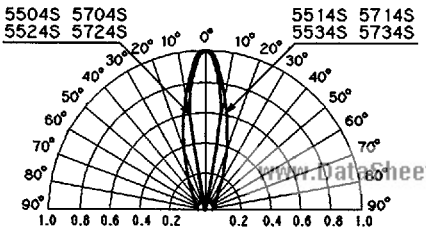
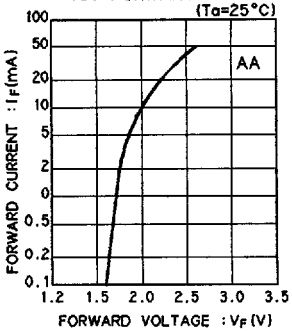
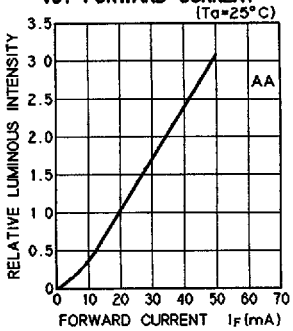


■ ORANGE

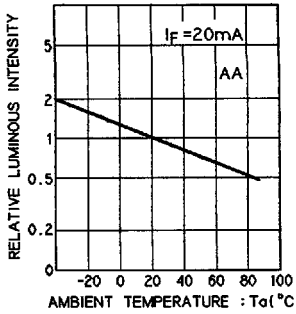
■ FORWARD CURRENT vs. FORWARD VOLTAGE



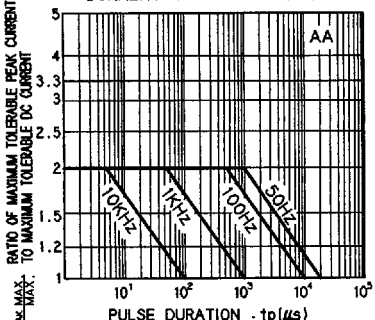
■ RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT



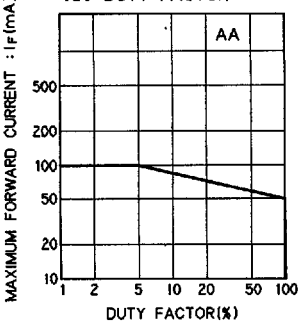
■ RELATIVE LUMINOUS INTENSITY vs. AMBIENT TEMPERATURE



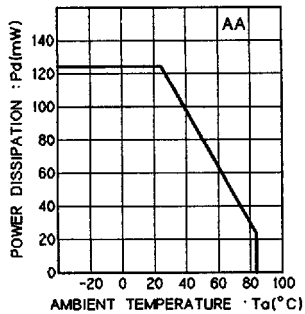
■ MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



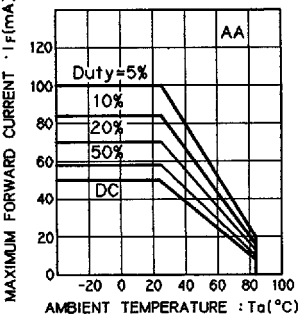
■ MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



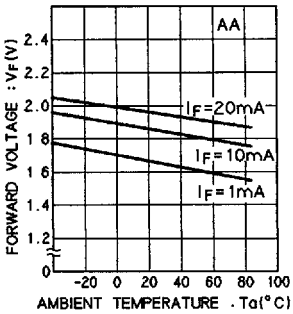
■ POWER DISSIPATION vs. AMBIENT TEMPERATURE



■ MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



■ FORWARD VOLTAGE vs. AMBIENT TEMPERATURE



■ SPATIAL DISTRIBUTION

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