

Feature:

- 0.80" Single digit sixteen segment display
- Low power consumption
- Packed in Board
- Gray face and White segment
- AllInGaP Technology (R, Y, AG)
- XX= color; Z=1: Common Cathode or 0: common Anode

Description:

These 0.80" Single digit sixteen segment displays are made with white segment and gray surface. The viewing distance is up to seven meters.

Application:

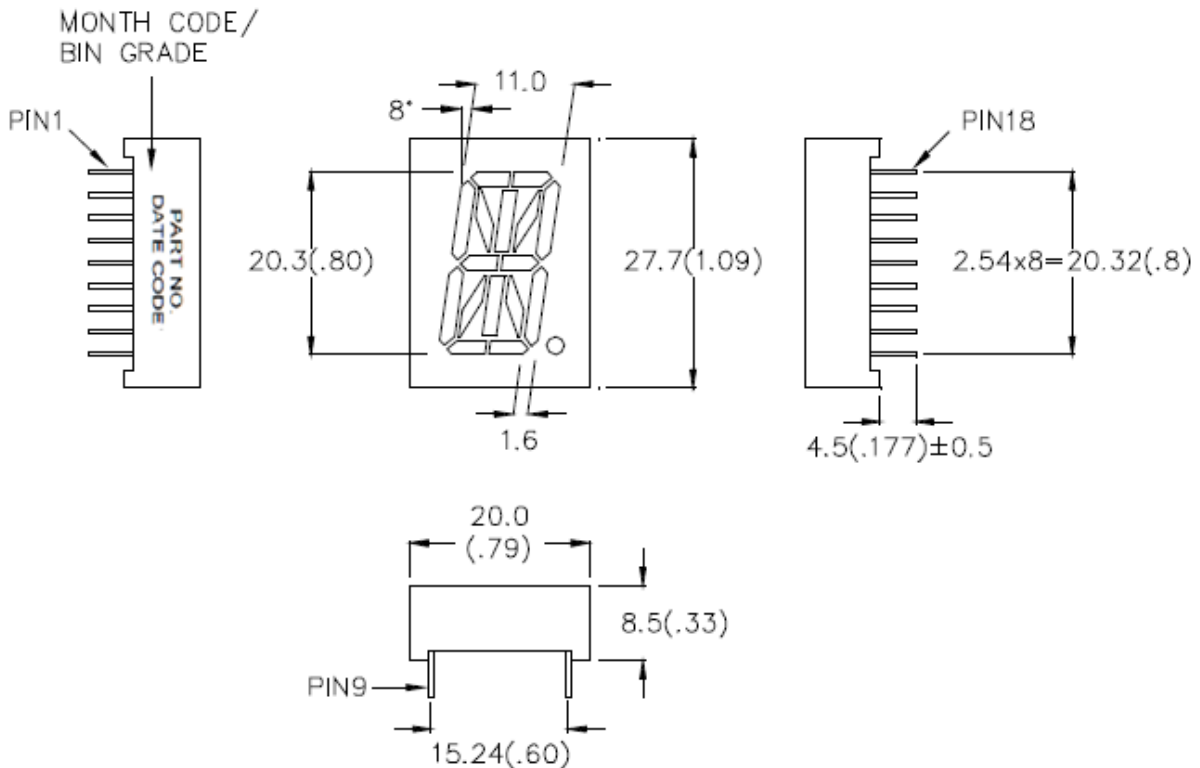
- Instrument panels
- Indoor/Outdoor display board
- Audio equipment

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.30mm

Electrical / Optical Characteristic (T=25 °C)

Product		Material	Color	I _F (mA)	V _F (V)		λ _D (nm)	λ _P (nm)	I _V *(mcd)
CC	CA				Typ.	Max.	Typ.	Typ.	Typ.
QBAS50R1	QBAS50R0	AllnGaP	Red	20	2.1	2.5	630	640	22
QBAS50Y1	QBAS50Y0	AllnGaP	Yellow	20	2.1	2.5	590	592	30
QBAS50AG1	QBAS50AG0	AllnGaP	Yellow Green	20	2.1	2.5	570	572	14

* Per segment

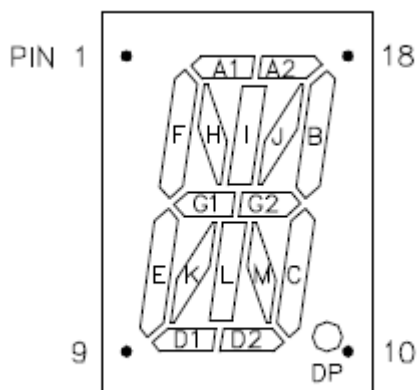
Absolute Maximum Rating

Material	P _d (mW)	Derating liner from 25 °C per dice (mA/°C)	I _F (mA)	I* _{PF} (mA)	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
AllnGaP	65	0.33	25	90	5	-25 to +85	-25 to +85	260

*Duty 1/10 @ 1KHz

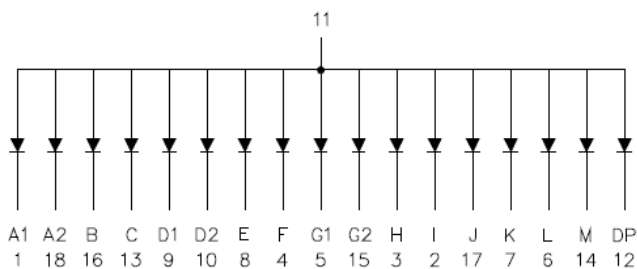
** IR Reflow for no more than 5 sec @ 260 °C

Pin Configuration

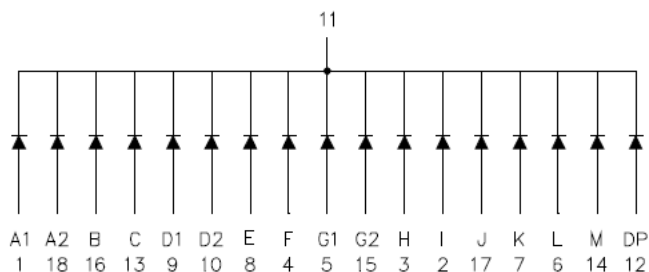


CA

CC

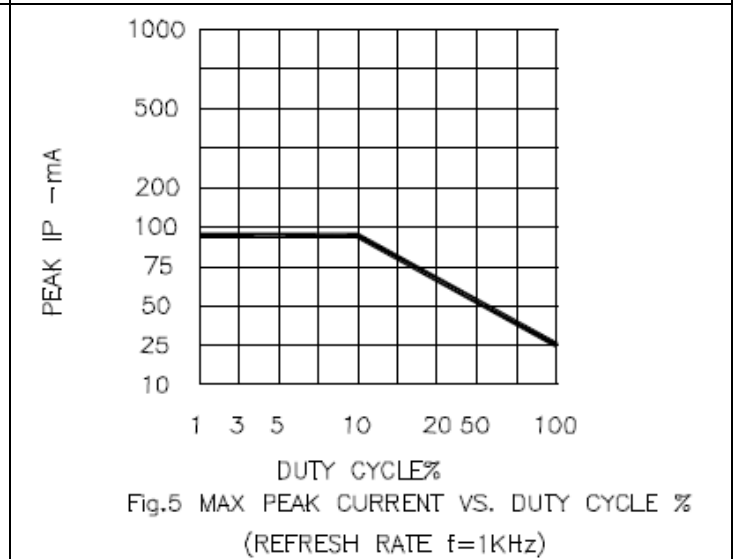
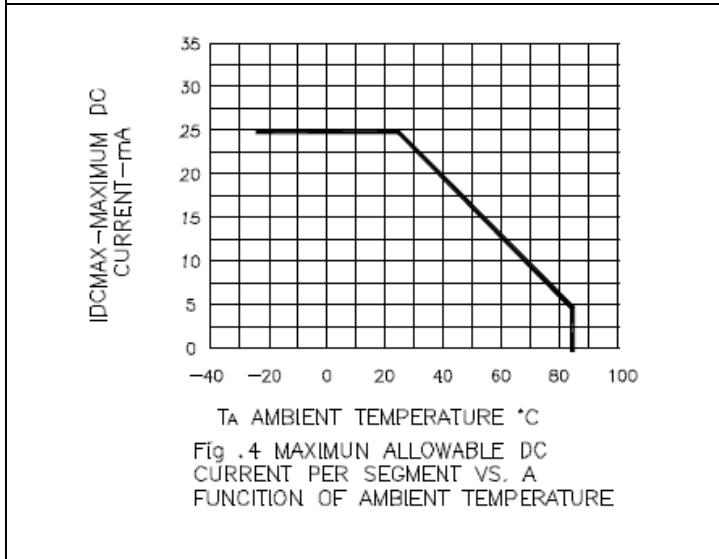
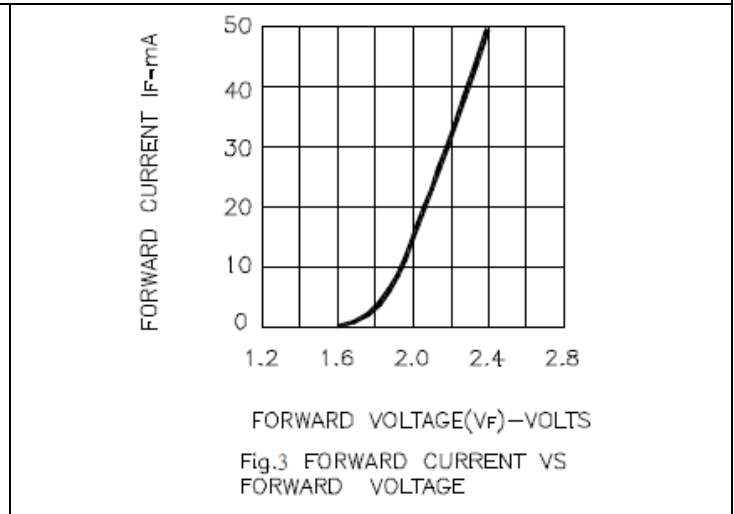
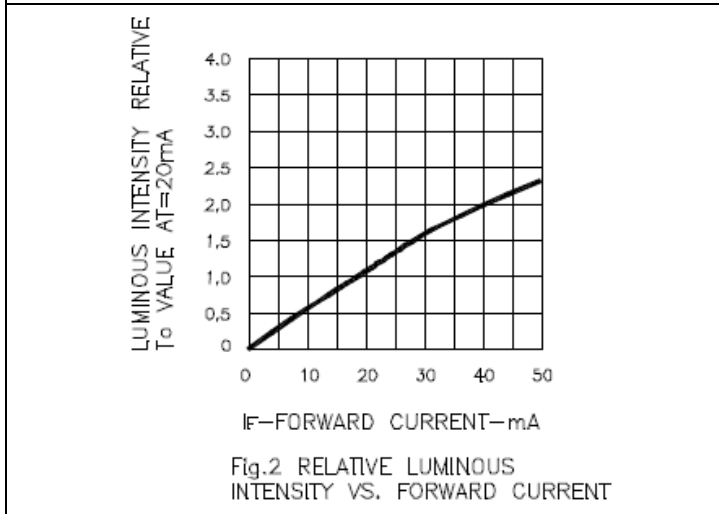
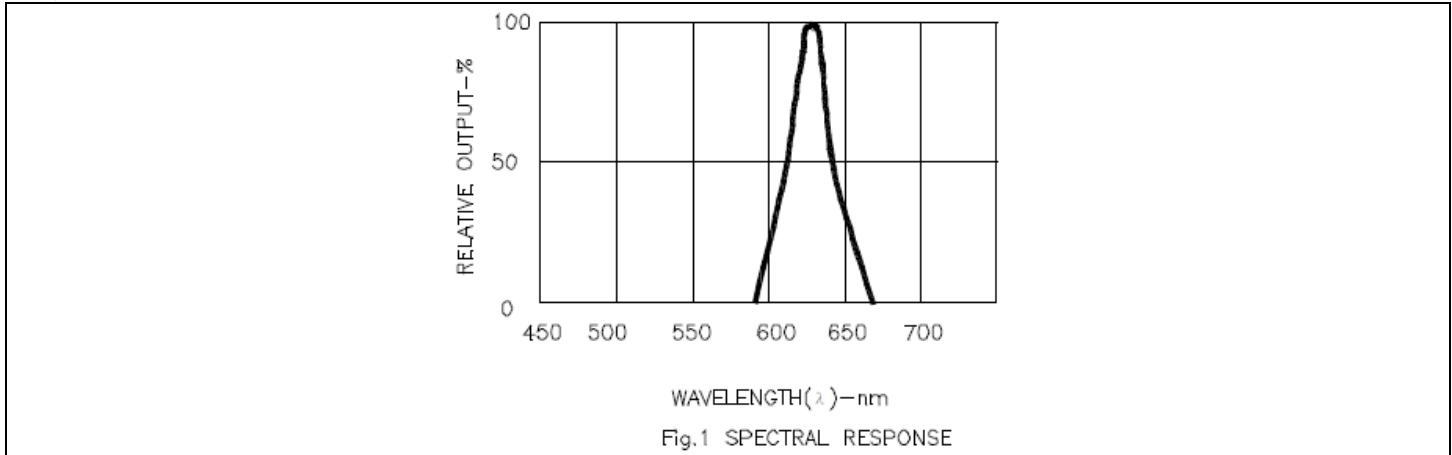


A0S-A804 is Common Anode.



A0S-C804 Common Cathode.

Characteristic Curves:
(R)



(Y)

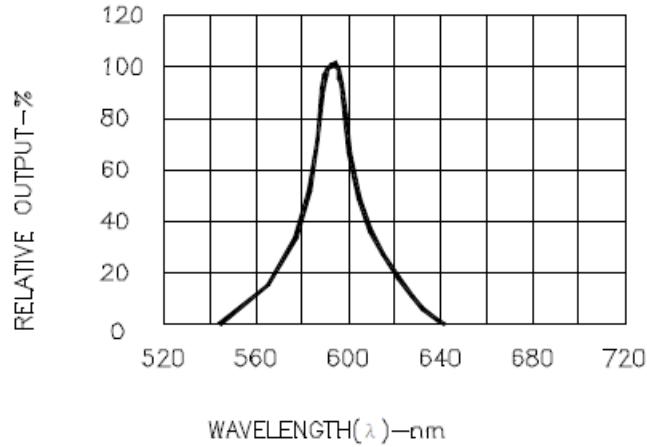


Fig.1 SPECTRAL RESPONSE

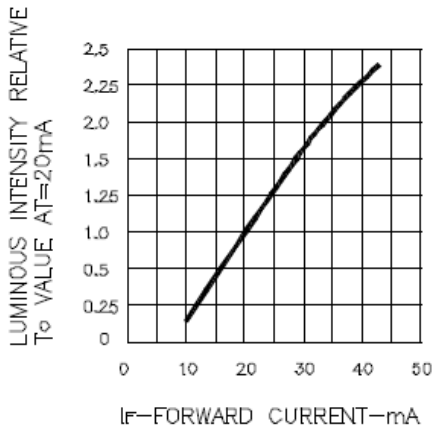


Fig.2 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

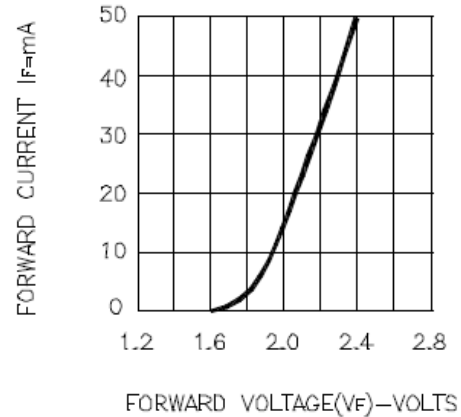


Fig.3 FORWARD CURRENT VS FORWARD VOLTAGE

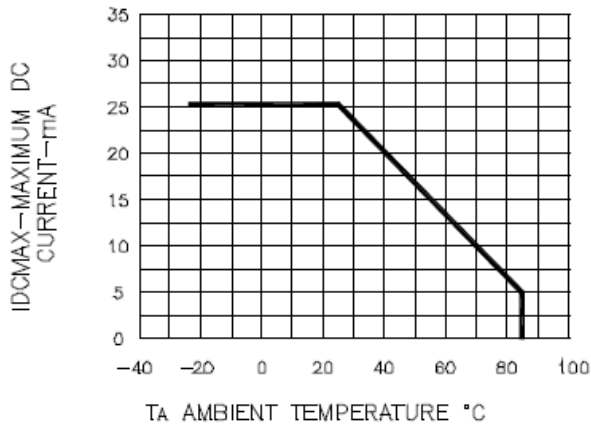


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE



Fig.5 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1kHz)

(AG)

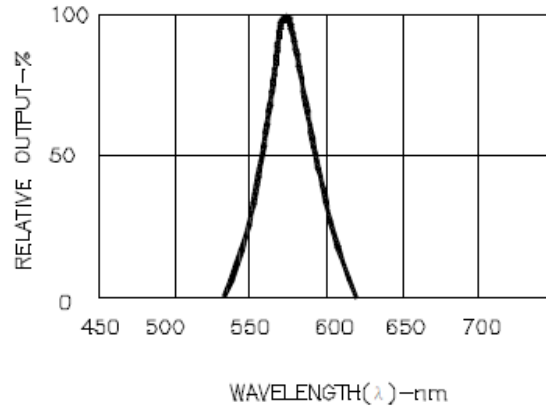


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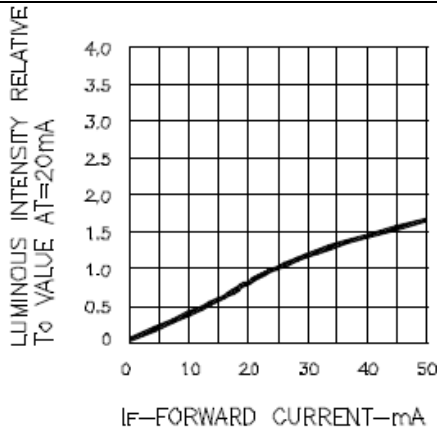


Fig.2 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

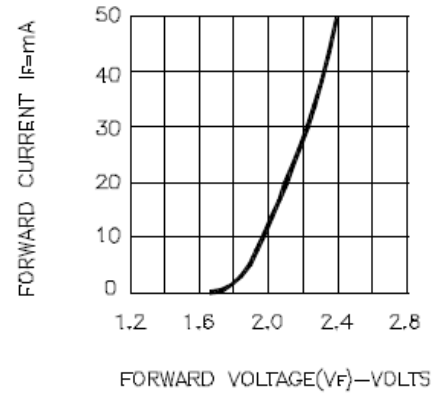


Fig.3 FORWARD CURRENT VS FORWARD VOLTAGE

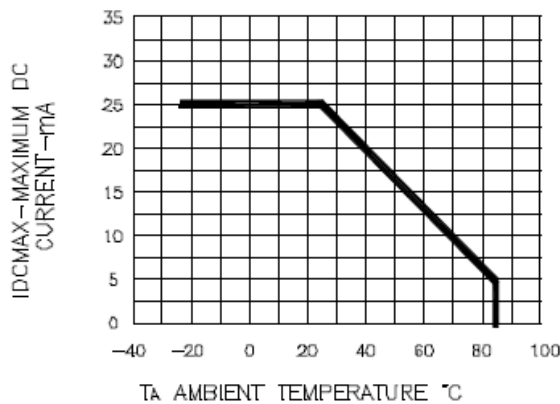
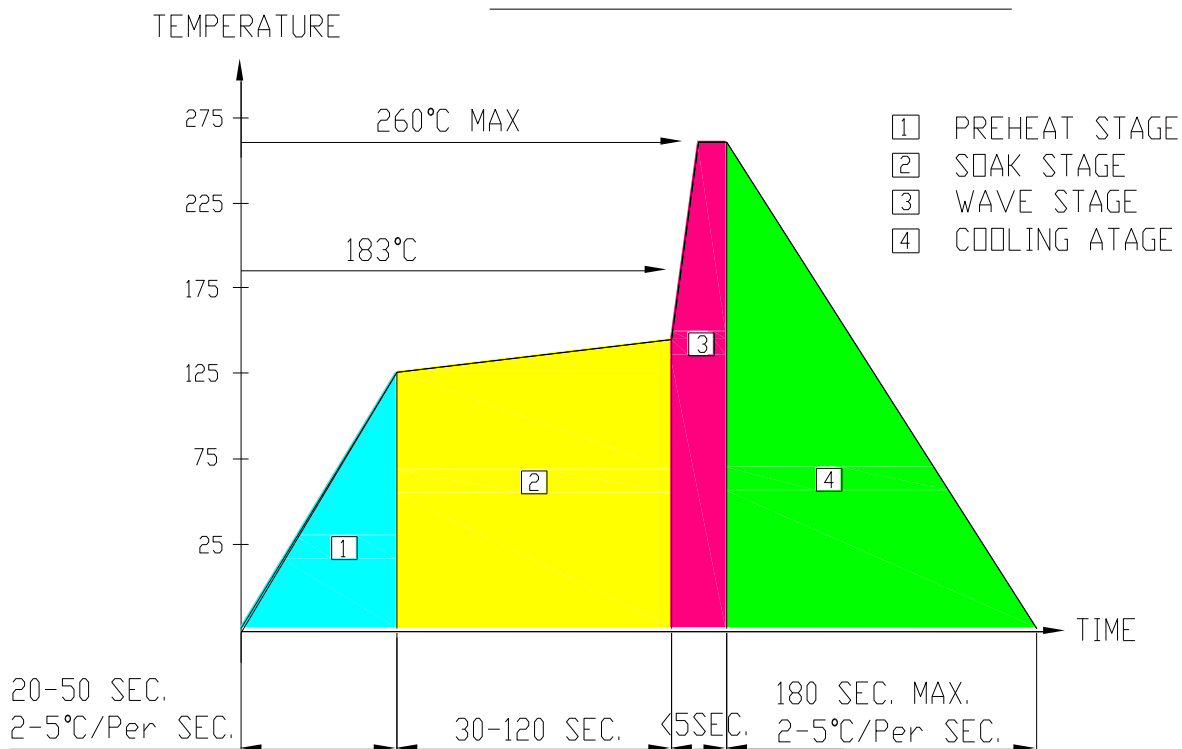


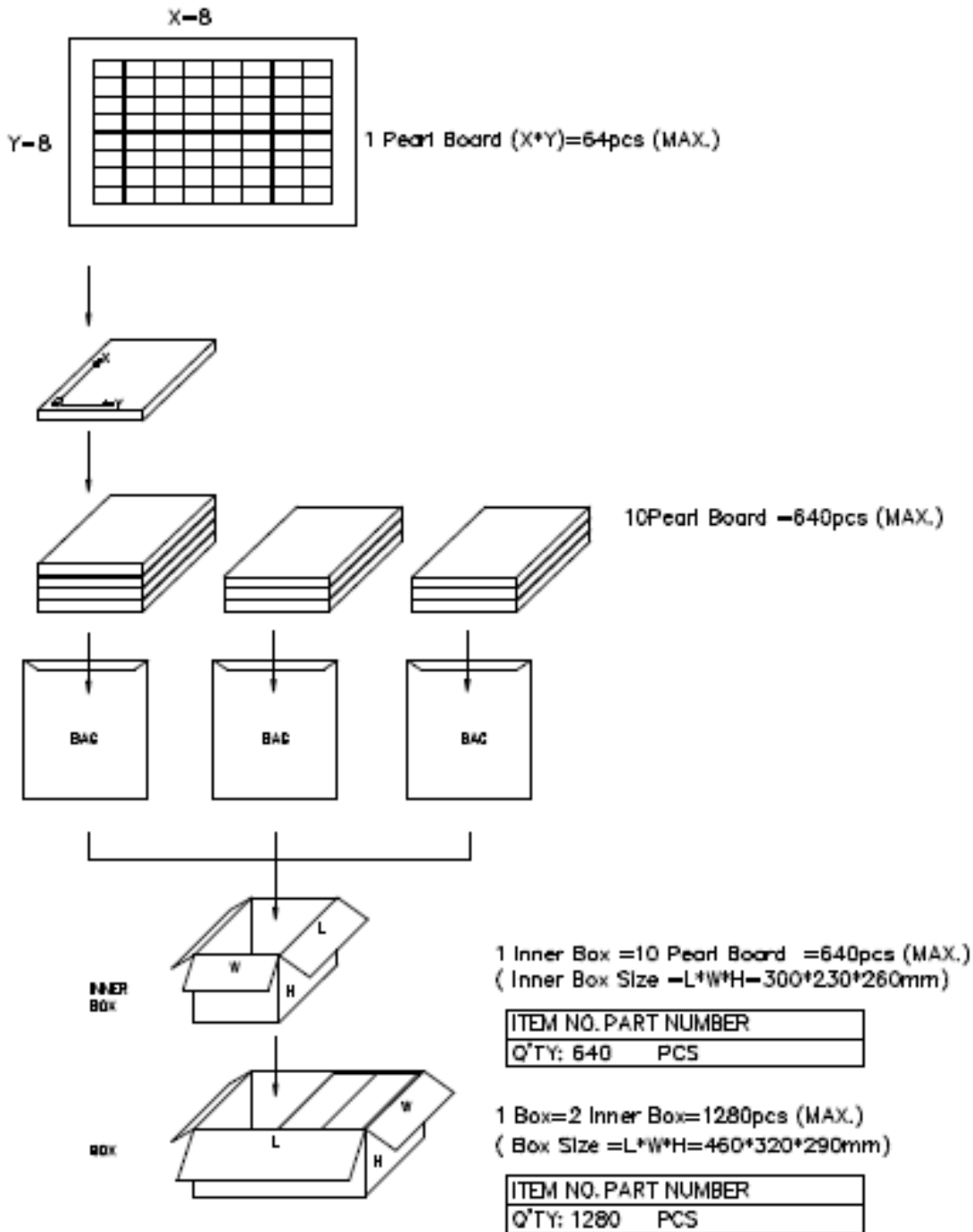
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Fig.5 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1KHz)

Solder Profile & Footprint:WAVE SOLDER PROFILE

Packing & Labeling:



Ordering Information:

Product		Orderable Part #		Spec Range	Quantity Per Board
CC	CA	CC	CA		
QBAS80R1	QBAS80R0	QBAS80R1	QBAS80R0	lv= 22 mcd typ. @ IF=20mA	64 pcs
QBAS80Y1	QBAS80Y0	QBAS80Y1	QBAS80Y0	lv= 30 mcd typ. @ IF=20mA	64 pcs
QBAS80AG1	QBAS80AG0	QBAS80AG1	QBAS80AG0	lv= 14 mcd typ. @ IF=20mA	64 pcs



QBAS80XXZ_series

0.80" Single Digit
Alphanumeric Display

Revision History:

Description:	Revision #	Revision Date
New Release of QBAS80XXZ_series	V1.0	02/02/2012