Feature:

- 0.54” Dual digit fourteen-segment display
- Low power consumption
- Packed in Board
- Gray face and White segment
- AlInGaP Technology (R, Y, AG)
- XX= color; Z=1: Common Cathode or 0: common Anode

Description:

These 0.54” Dual digit fourteen-segment displays are made with white segment and gray surface. The viewing distance is up to seven meters.

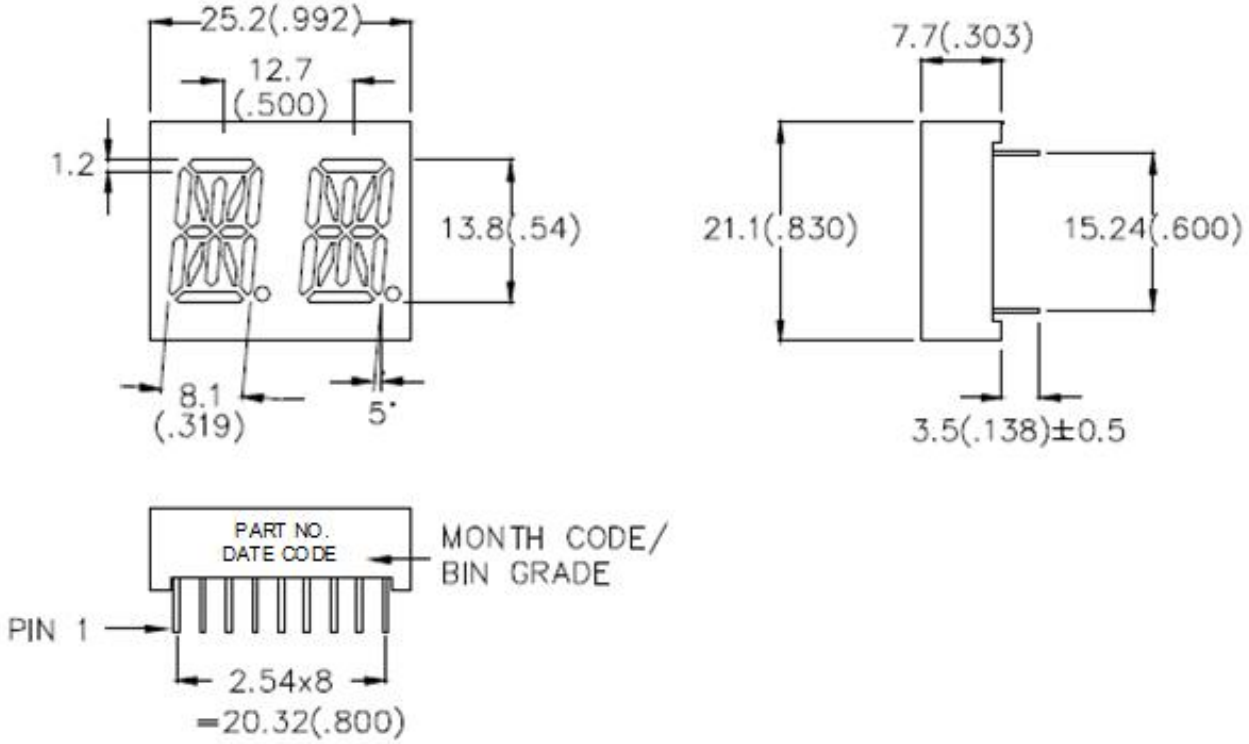
Application:

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

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant

Dimension:



Units: mm / tolerance = +/-0.25mm

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.
QBAD54R1	QABD54R0	AlInGaP	Red	20	2.1	2.5	630	640	22
QBAD54Y1	QABD54Y0	AlInGaP	Yellow	20	2.1	2.5	590	592	30
QBAD54AG1	QABD54AG0	AlInGaP	Yellow Green	20	2.1	2.5	570	572	12

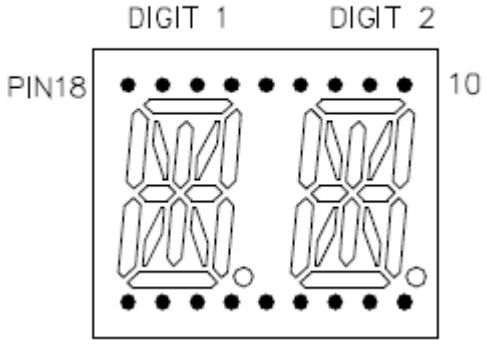
* Per segment

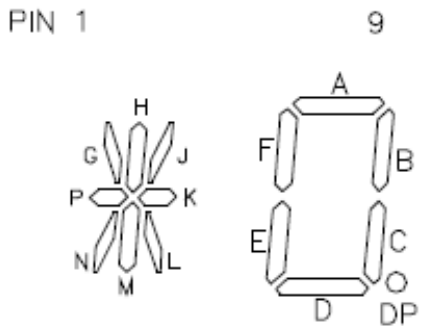
Absolute Maximum Rating

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)**
AlInGaP	65	0.33	25	90	5	-25 to + 85	-25 to +85	260

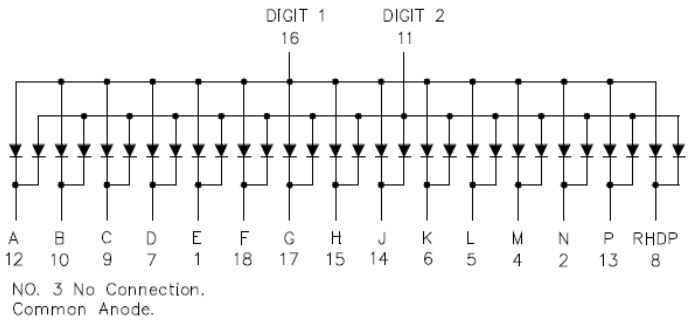
*Duty 1/10 @ 1KHz
** IR Reflow for no more than 5 sec @ 260 °C

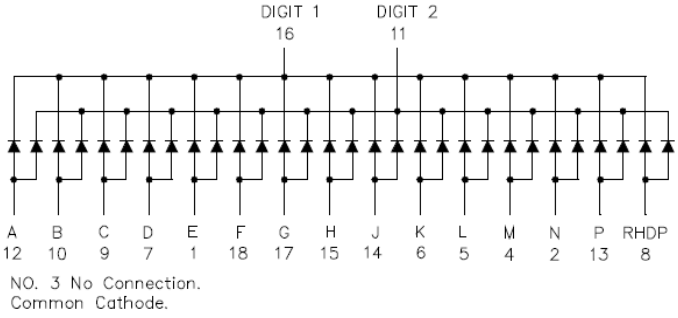
Pin Configuration





CA	CC





Characteristic Curves:

(R)

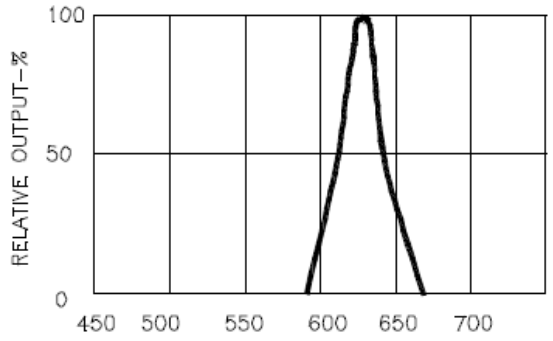


Fig.1 SPECTRAL RESPONSE

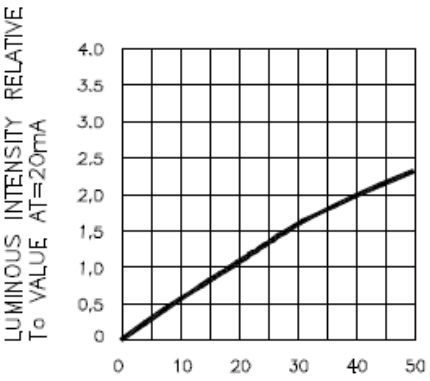


Fig.2 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

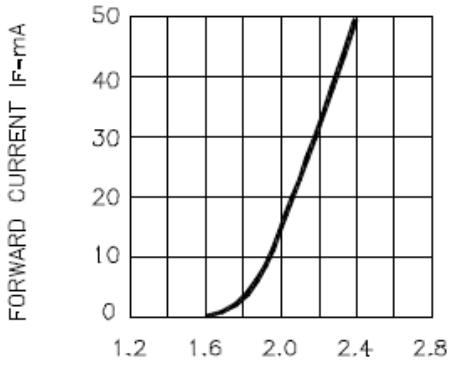


Fig.3 FORWARD CURRENT VS FORWARD VOLTAGE

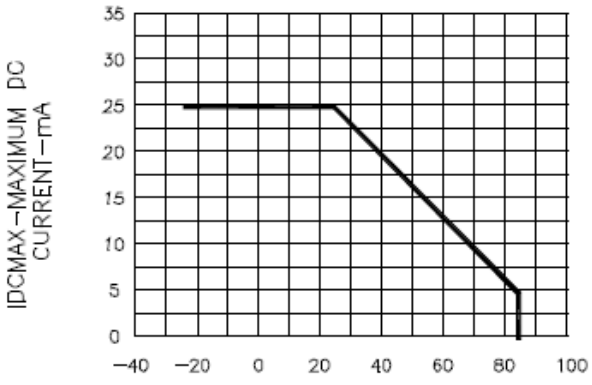


Fig .4 MAXIMUN ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCITION OF AMBIENT TEMPERATURE

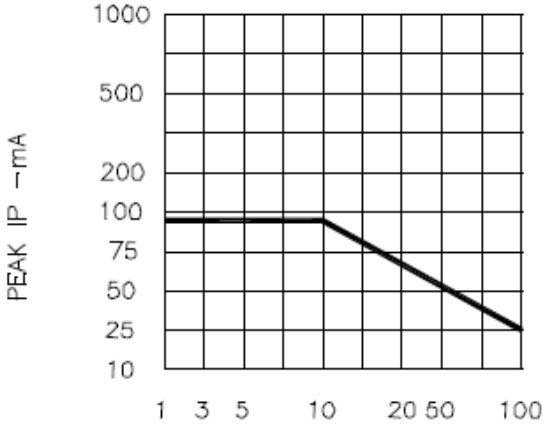


Fig.5 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1KHz)

(Y)

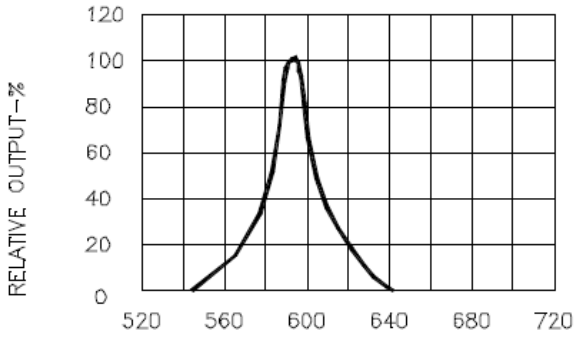


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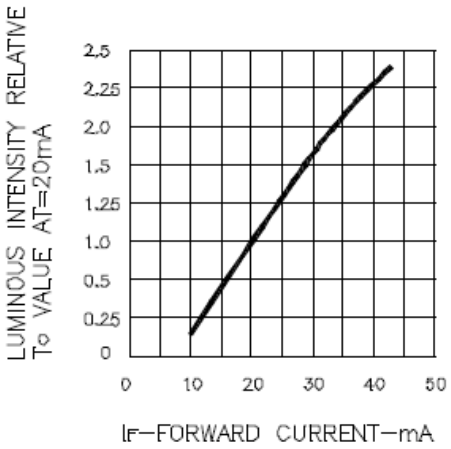


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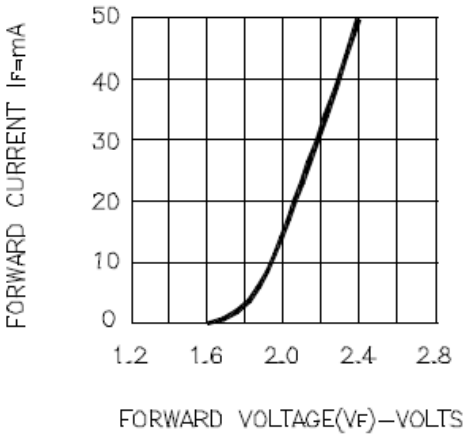


Fig.3 FORWARD CURRENT VS FORWARD VOLTAGE

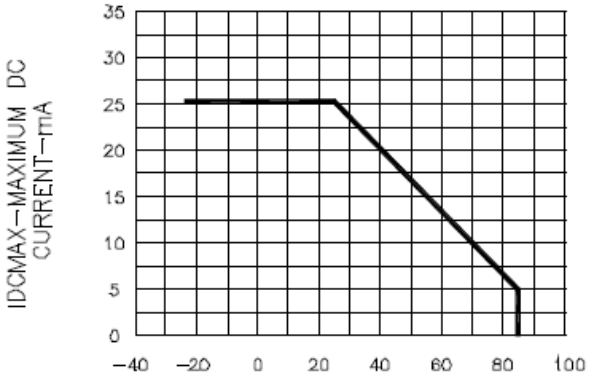


Fig .4 MAXIMUN ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCITION OF AMBIENT TEMPERATURE

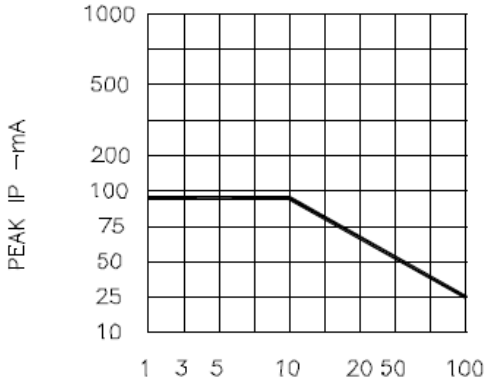


Fig.5 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE f=1KHz)

(AG)

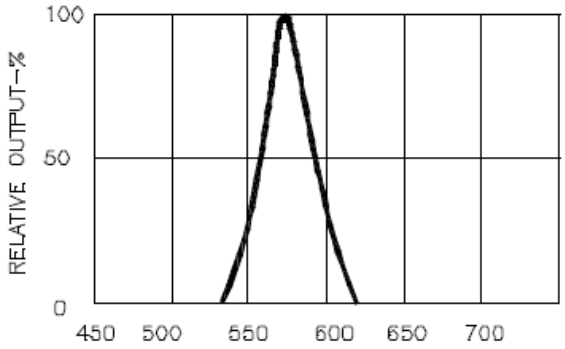


Fig.1 SPECTRAL RESPONSE

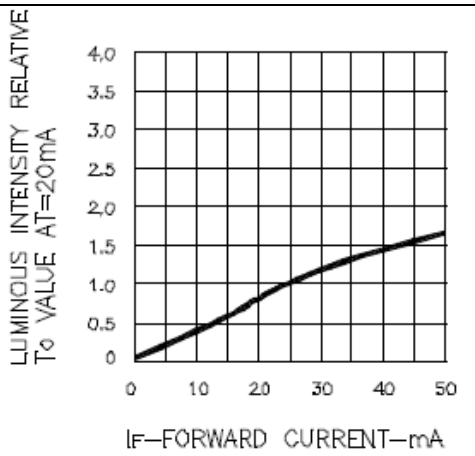


Fig.2 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

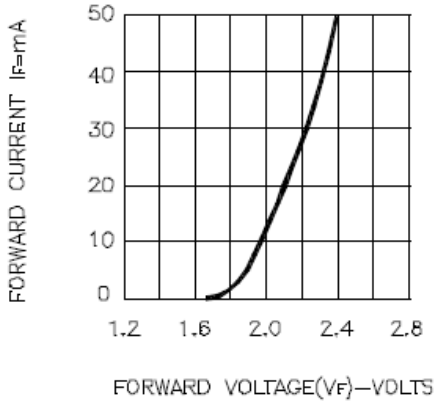


Fig.3 FORWARD CURRENT VS FORWARD VOLTAGE

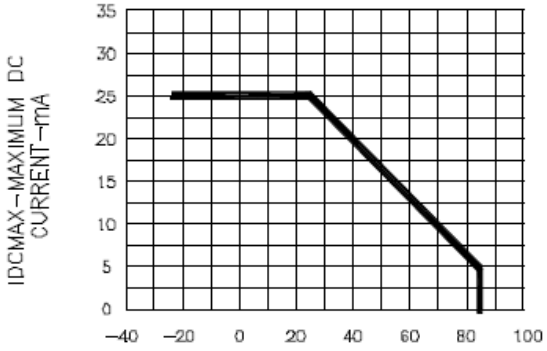


Fig .4 MAXIMUN ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCITION OF AMBIENT TEMPERATURE

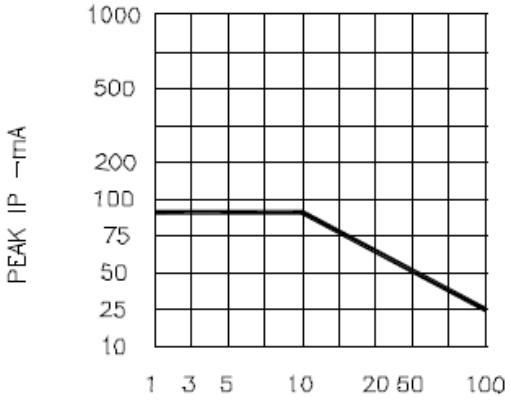
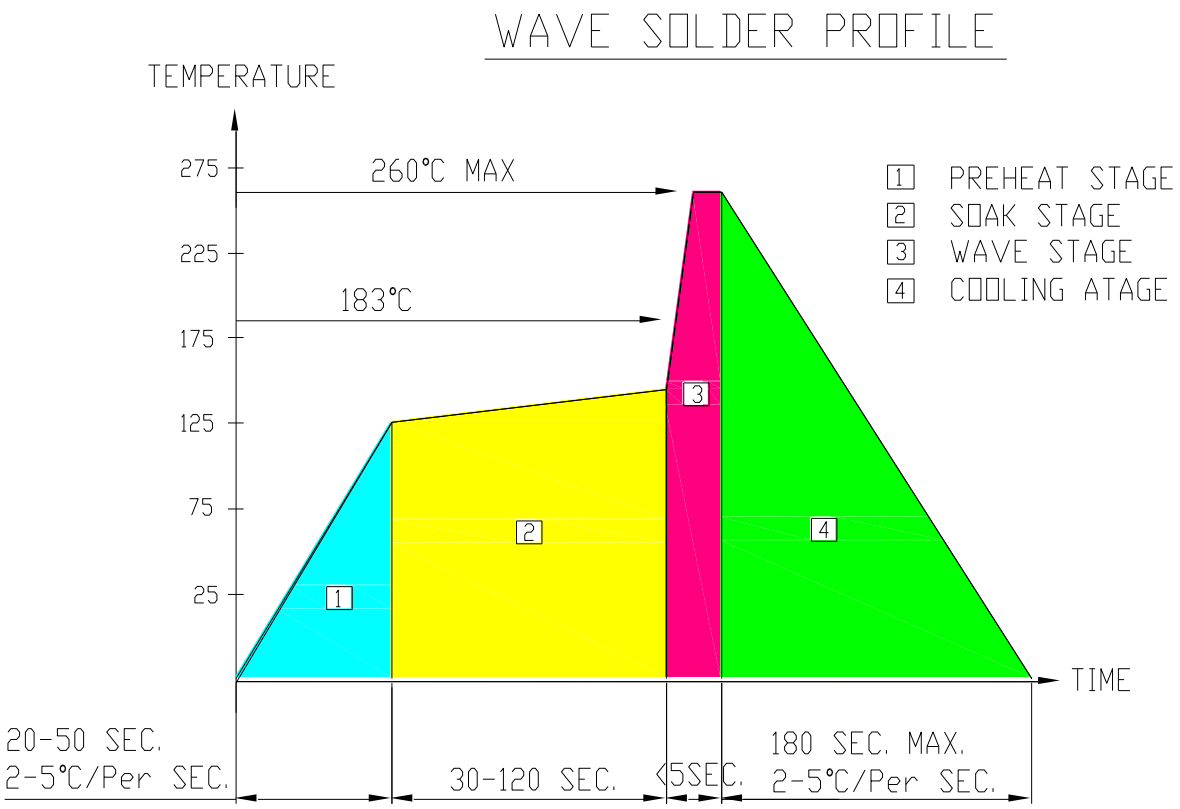
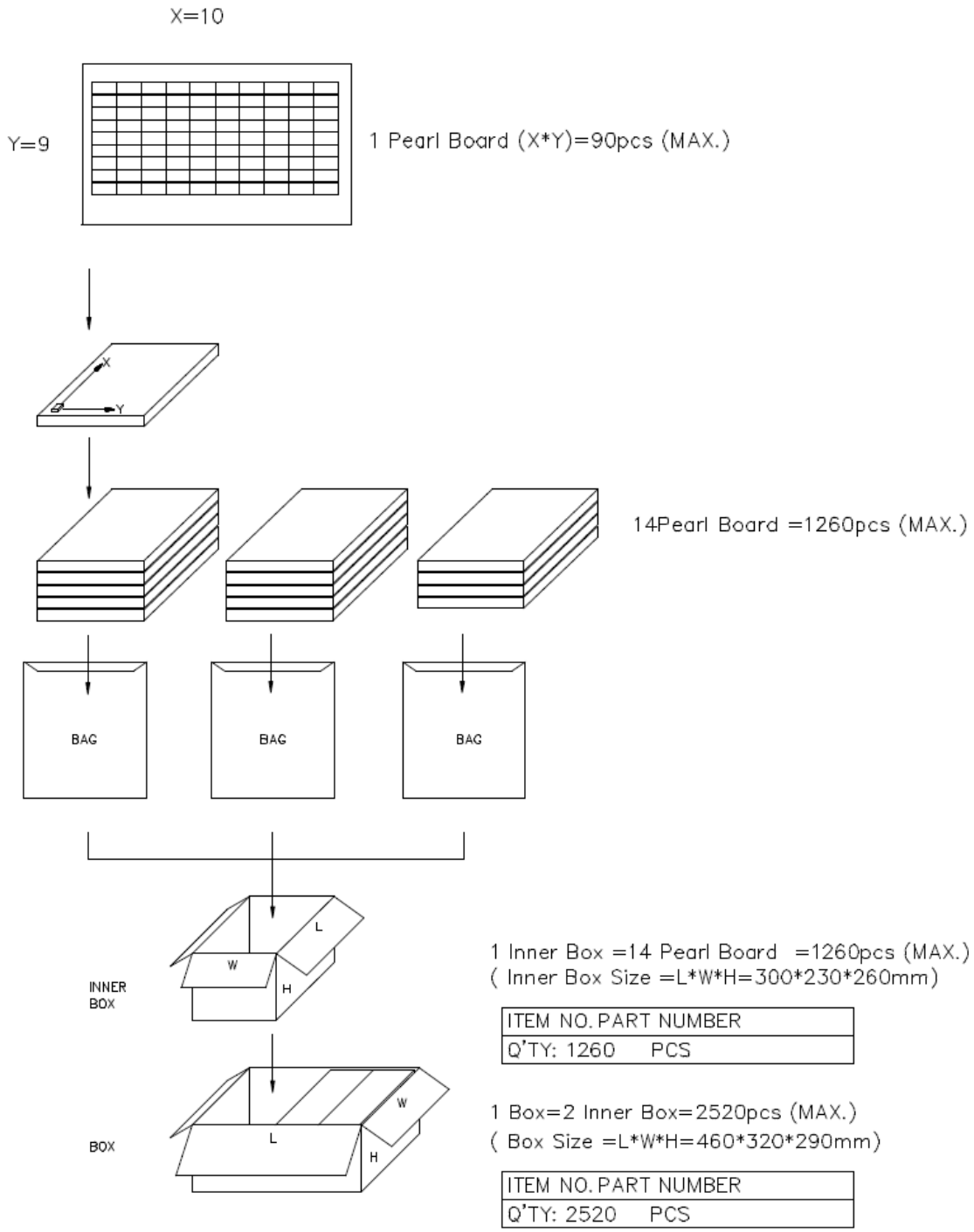


Fig.5 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE f=1KHz)

Solder Profile & Footprint:



Packing & Labeling:



Ordering Information:

Product		Orderable Part #		Spec Range	Quantity Per Board
CC	**CA**	**CC**	**CA**		
QBAD54R1	QBAD54R0	QBAD54R1	QBAD54R0	Iv= 22 mcd typ. @ IF=20mA	90 pcs
QBAD54Y1	QBAD54Y0	QBAD54Y1	QBAD54Y0	Iv= 30 mcd typ. @ IF=20mA	90 pcs
QBAD54AG1	QBAD54AG0	QBAD54AG1	QBAD54AG0	Iv= 12 mcd typ. @ IF=20mA	90 pcs

Revision History:

Description:	Revision #	Revision Date
New Release of QBAD54XXZ_series	V1.0	02/01/2012