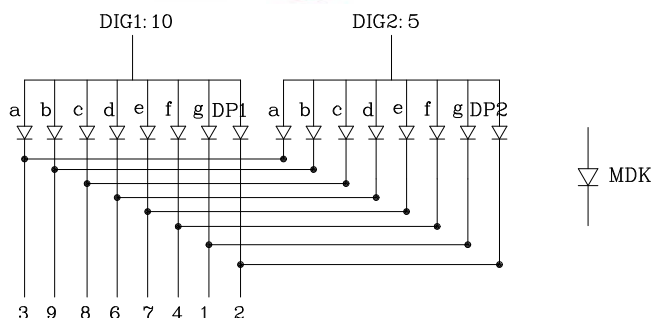


PRELIMINARY SPEC

Features

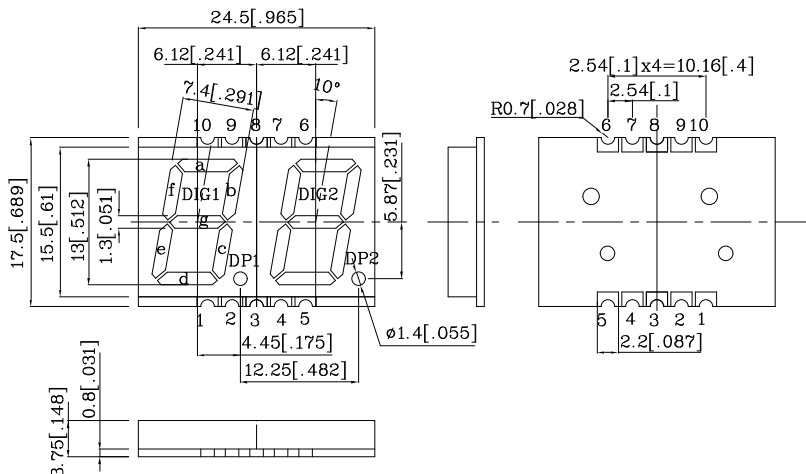
- 0.51 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE,WHITE SEGMENT.
- PACKAGE : 200PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



Notes:

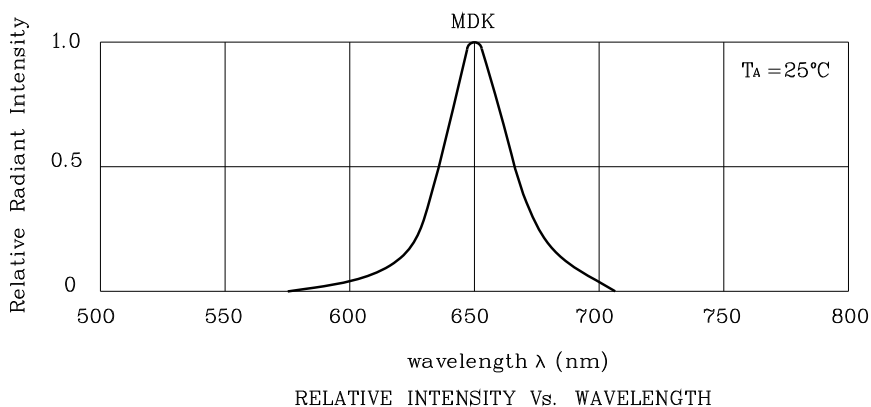
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
3. The gap between the reflector and PCB shall not exceed 0.25mm.
- 4.Specifications are subject to change without notice.

Absolute Maximum Ratings (TA=25°C)		MDK (InGaAlP)	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i _{FS}	185	mA
Power Dissipation	P _T	75	mW
Operating Temperature	T _A	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +85	

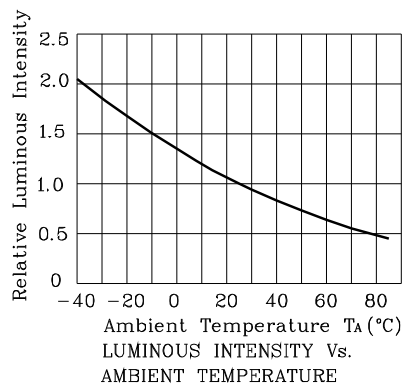
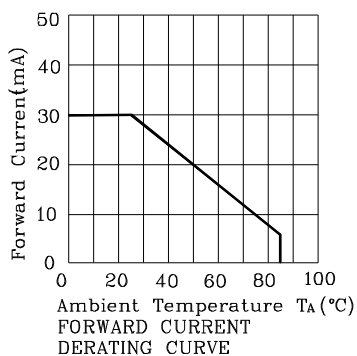
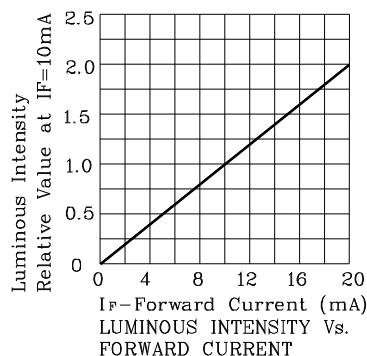
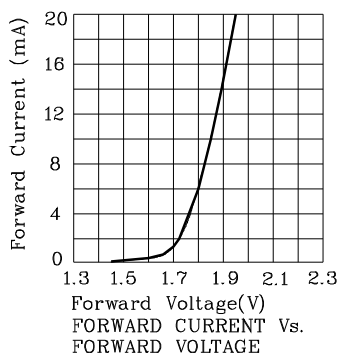


Operating Characteristics (TA=25°C)		MDK (InGaAlP)	Unit
Forward Voltage (Typ.) (IF=10mA)	V _F	1.85	V
Forward Voltage (Max.) (IF=10mA)	V _F	2.5	V
Reverse Current (Max.) (VR=5V)	I _R	10	uA
Wavelength of Peak Emission (Typ.) (IF=10mA)	λ P	650	nm
Wavelength of Dominant Emission (Typ.) (IF=10mA)	λ D	635	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=10mA)	$\Delta\lambda$	28	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	35	pF

Part Number	Emitting Color	Emitting Material	Luminous Intensity (1F=10mA) ucd	Wavelength nm λ P	Description
			min.	typ.	
ZFMDK129A2	Red	InGaAlP	12000	41040	650 Common Anode. Rt. Hand Decimal
Published Date : FEB 28, 2008		Drawing No : SDSA6473		V1	Checked : Shin Chi
P.1/4					



❖ MDK



Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: $\pm 1\text{nm}$
2. Luminous Intensity / Luminous Flux: $\pm 15\%$
3. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.

Figure 1 is a line graph showing the temperature profile of the test specimen over time. The vertical axis represents Temperature in degrees Celsius (°C), ranging from 0 to 300. The horizontal axis represents Time in seconds (sec), ranging from 0 to 300. The profile starts at 25°C at time 0. It rises at a rate of 4°C/s to 150°C at approximately 40 seconds. From 150°C, it continues to rise at 4°C/s to 180°C, which occurs between 60 and 120 seconds. From 180°C, it rises at 4°C/s to 260°C, which occurs within a maximum of 10 seconds. The temperature then remains at 260°C for a maximum of 10 seconds. Finally, it cools at a rate of 4°C/s. Key temperatures marked on the graph are 25°C, 150~180°C, 230°C, and 260°C max. Time intervals are also indicated: 60~120s for the 150~180°C range, and 30~50s for the 260°C max plateau.

- 1.Maximum soldering temperature should not exceed 260°C.
- 2.Recommended reflow temperature: 145°C–260°C.
- 3.Do not put stress to the epoxy resin during high temperatures conditions.

Technical drawing of a tape with dimensions and a cross-section. The main drawing shows a rectangular tape with a width of 32 ± 0.1 and a height of 14.2 ± 0.1 . The top edge has a thickness of 1.75 ± 0.1 . The tape features two central rectangular areas, each containing four diamond-shaped features. The distance between the centers of these two areas is 32 ± 0.1 . The width of each central area is 4 ± 0.1 , and the distance between the centers of the diamond features within each area is 2 ± 0.1 . The diameter of the circular features along the top and bottom edges is $\phi 1.55 \pm 0.05$. A cross-section on the right shows the tape's profile with a width of 4 ± 0.1 and a thickness of 0.3 ± 0.1 . A label 'TAPE' with an arrow points to the right.

PACKING & LABEL SPECIFICATIONS ZFMDK129A2

