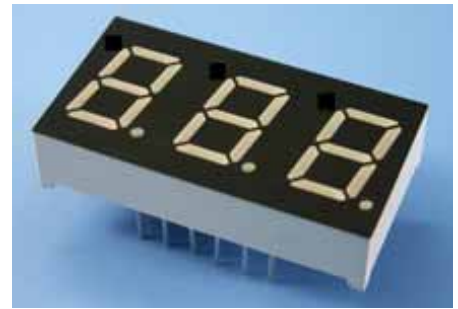


**Features:**

- High efficiency, low power consumption.
- Extremely low current.
- Luminous evenly distributed on each segment.
- Low development cost.

**Descriptions:**

- Industrial standard size.
- These display provide excellent reliability in bright ambient light.
- These devices are made with white segments and black surface.

**Applications:**

- Audio equipment or Instrument panels.
- General use for digital indicators.
- Multimedia product.

**Selection Guide:**

Part No.		Chip		Lens Color
Anode	Cathode	Material	Emitting Color	
LS0403ASR	LS0403ASR	GaAlAs	Super Red	White Diffused
LS0403ASR	LS0403ASR	GaP	Green	

**Absolute Maximum Rating %Ta=25 )**

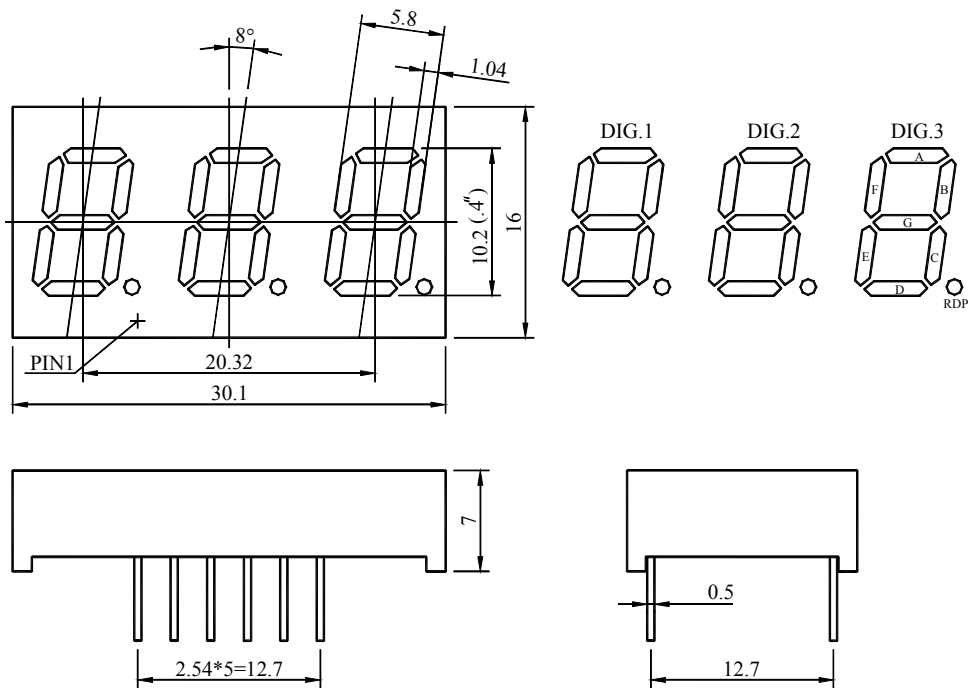
Parameter	Symbol	Super Red	Green	Unit
Power Dissipation/Segment	$P_d$	50	60	mW
Peak Forward Current /Segment (Duty 1/10@ 1KHz)	$I_{FP}$	70	70	mA
Continuous Forward Current /Segment	$I_F$	20	20	mA
Recommend use current /Segment	$I_F$	5~10	5~10	mA
Reverse Voltage /Segment	$V_R$	5	5	V
Operating Temperature Range	$T_{opr}$	-25~ +75		
Storage Temperature Range	$T_{stg}$	-30 ~ +85		
Solder Temperature	$T_{sol}$	260 ± 5		

- Notes :** 1、 This is the limit current . It is not allowed to use when the product work continuously.  
 2、 It is recommended that the product is driven by TTL,CMOS.  
 3、 Soldering time 5 seconds.

**Electrical Optical Characteristics% Ta=25 )**

Parameter	Symbol	Super Red		Green		Unit	Test Condition
		Typ.	Max.	Typ.	Max.		
Luminous Intensity /Segment	$I_V$	9.6	--	4.8	--	mcd	$I_F=10mA$
Forward Voltage /Segment	$V_F$	1.85	2.3	2.2	2.5	V	$I_F=20mA$
Reverse Current /Segment	$I_R$	--	50	--	50	uA	$V_R=5V$
Dominant Wavelength	$d$	645	--	565	--	nm	$I_F=20mA$
Spectral Line Half Width		30	--	30	--	nm	$I_F=20mA$

### Package Dimensions:

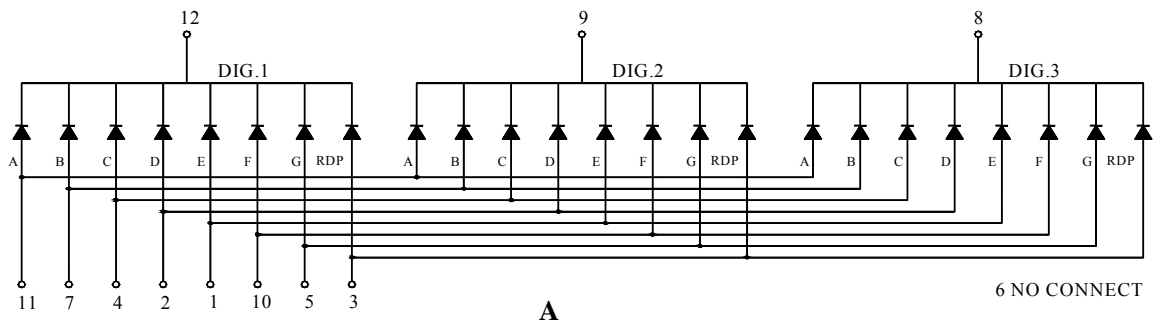


### NOTES :

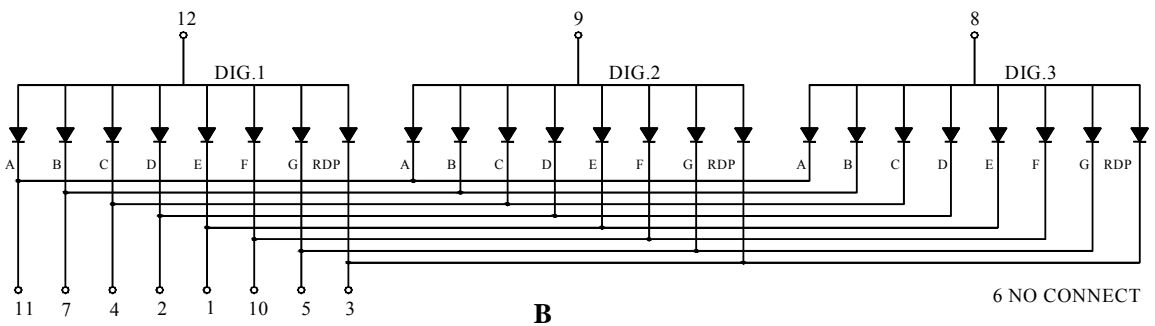
- All dimensions are in millimetres (mm), Tolerance is  $\pm 0.25\text{mm}$  unless otherwise noted.
- Specifications are subject to change without notice.

### Internal Circuit:

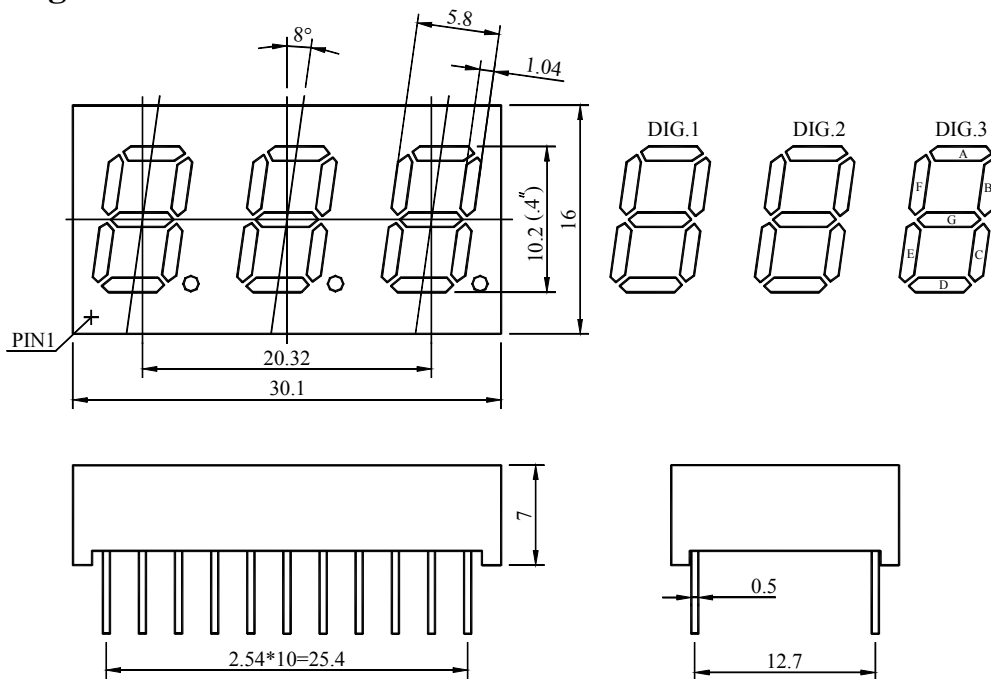
#### Common Cathode



#### Common Anode



## Package Dimensions:

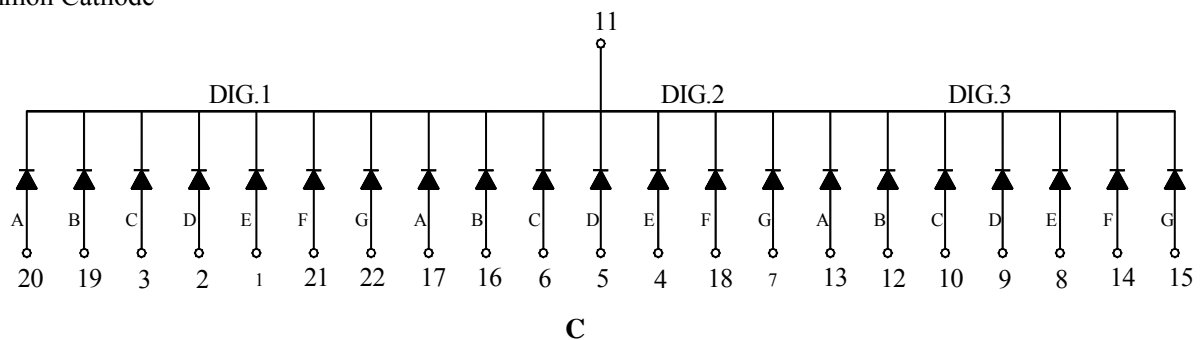


### NOTES :

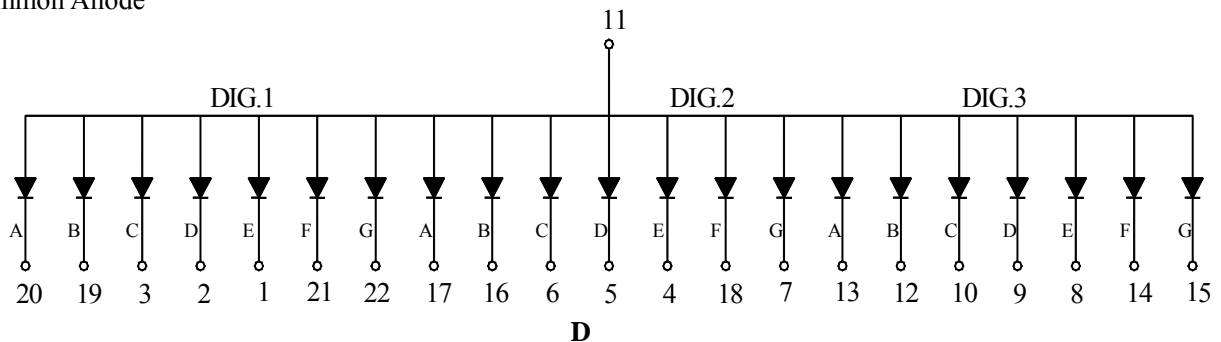
- All dimensions are in millimetres (mm), Tolerance is  $\pm 0.25\text{mm}$  unless otherwise noted.
- Specifications are subject to change without notice.

## Internal Circuit:

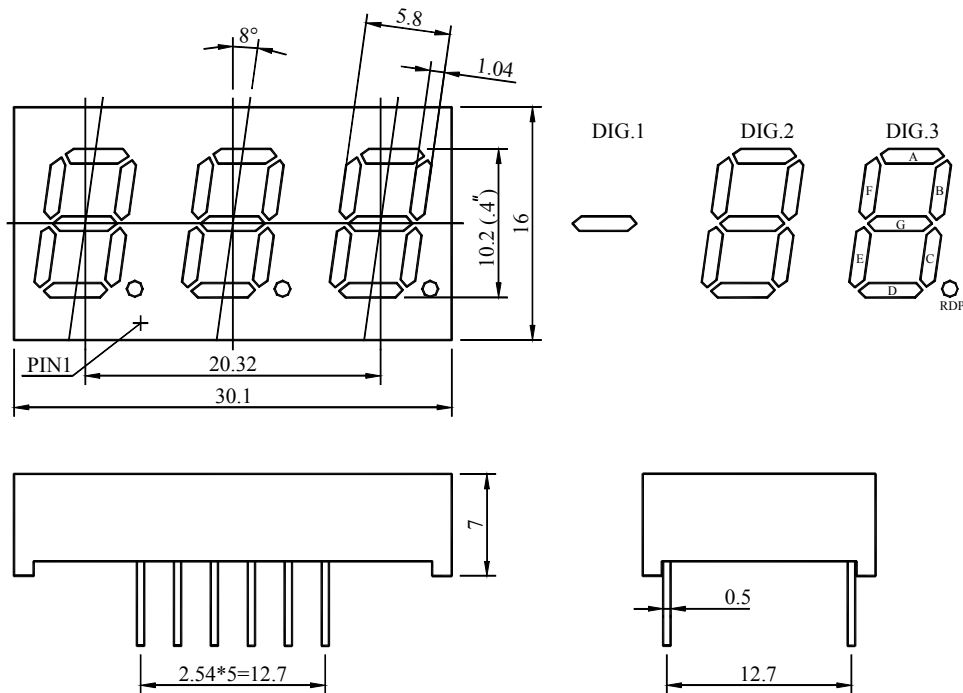
### Common Cathode



### Common Anode



## Package Dimensions:

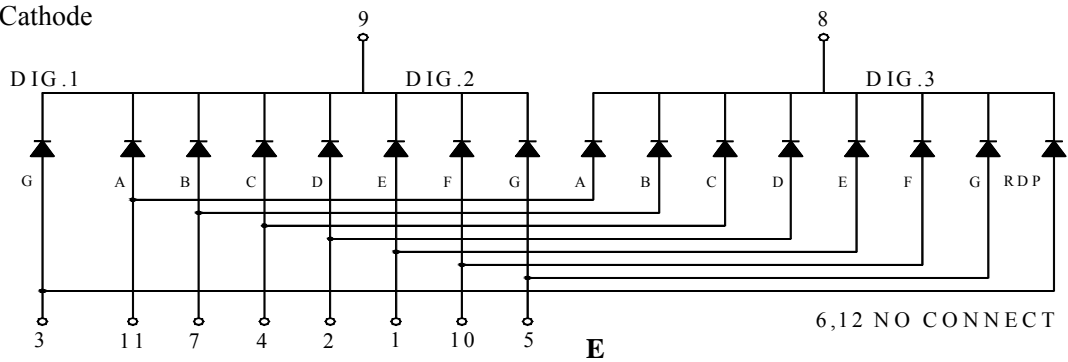


### NOTES :

- All dimensions are in millimetres (mm), Tolerance is  $\pm 0.25\text{mm}$  unless otherwise noted.
- Specifications are subject to change without notice.

## Internal Circuit:

### Common Cathode



### Common Anode

