# Agilent HSMx-A10x-xxxxx PLCC-2 Surface Mount LED Indicator Data Sheet



#### Description

This family of SMT LEDs is packaged in the industry standard PLCC-2 package. These SMT LEDs have high reliability performance and are designed to work under a wide range of environmental conditions. This high reliability feature makes them ideally suited to be used under harsh interior automotive as well as interior signs application conditions.

To facilitate easy pick & place assembly, the LEDs are packed in EIA-compliant tape and reel. Every reel will be shipped in single intensity and color bin, except red color, to provide close uniformity.

These LEDs are compatible with IR solder reflow process. Due to the high reliability feature of these products, they can also be mounted using through-the-wave soldering process.

The super wide viewing angle at 120° makes these LEDs ideally suited for panel, push button, or general backlighting in automotive interior, office equipment, industrial equipment, and home appliances. The flat top emitting surface makes it easy for these LEDs to mate with light pipes. With the built-in reflector pushing up the intensity of the light output, these LEDs are also suitable to be used as LED pixels in interior electronic signs.

#### **Features**

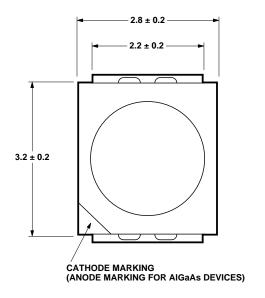
- Industry standard PLCC-2 package
- · High reliability LED package
- High brightness using AllnGaP and InGaN dice technologies
- Available in full selection of colors
- Super wide viewing angle at 120°
- Available in 8 mm carrier tape on 7 inch reel (2000 pieces)
- Compatible with both IR and TTW soldering process

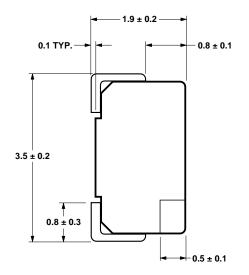
#### **Applications**

- · Interior automotive
  - -Instrument panel backlighting
  - -Central console backlighting
  - -Cabin backlighting
- · Electronic signs and signals
  - -Interior full color sign
  - -Variable message sign
- Office automation, home appliances, industrial equipment
  - -Front panel backlighting
  - -Push button backlighting
  - -Display backlighting

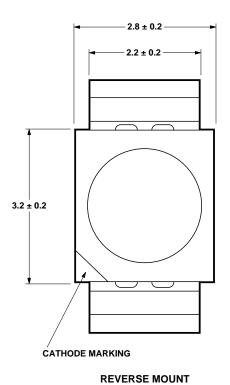
CAUTION: HSMN,M,K and E-A10x-xxxxx LEDs are Class 2 ESD sensitive. Please observe appropriate precautions during handling and processing. Refer to Agilent Application Note AN-1142 for additional details.

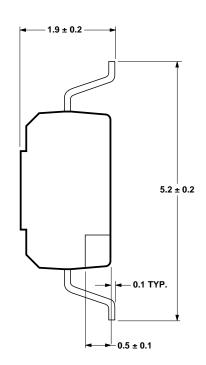
## Package Dimensions





**TOP MOUNT** 





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NOTE: ALL DIMENSIONS IN MILLIMETERS.

## **Device Selection Guide**

Red						
Part Number	Min. Iv (mcd)	Typ. Iv (mcd)	Max. Iv (mcd)	Test Current (mA)	Dice Technology	
HSMS-A100-J00J1	4.0	15.0	-	20	GaP	
HSMS-A100-L00J1	10.0	15.0	-	20	GaP	
HSMS-A100-H70J2	3.0	-	8.0	10	GaP	
HSMS-A100-J80J2	5.0	-	15.5	10	GaP	
HSMH-A100-L00J1	10.0	15.0	-	20	AlGaAs	
HSMH-A100-N00J1	25.0	50.0	-	20	AlGaAs	
HSMH-A100-L70J2	12.5	-	32.0	10	AlGaAs	
HSMH-A100-M80J2	20.0	-	62.0	10	AlGaAs	
HSMH-A100-P30J1	40.0	-	100.0	20	AlGaAs	
HSMC-A100-J00J1	4.0	100.0	-	20	AlinGaP	
HSMC-A100-Q00J1	63.0	100.0	-	20	AlInGaP	
HSMC-A100-R00J1	100.0	140.0	-	20	AlinGaP	
HSMC-A101-S00J1	160.0	220.0	-	20	AlinGaP	
HSMZ-A100-T00J1	250.0	350.0	-	20	AlInGaP	
HSMC-A100-P30J1	40.0	-	100.0	20	AlInGaP	
HSMC-A100-Q40J1	63.0	-	200.0	20	AlinGaP	
HSMC-A101-R80J1	125.0	-	395.0	20	AlinGaP	
HSMZ-A100-S80J1	200.0	-	620.0	20	AlinGaP	

# Red Orange

Part Number	Min. Iv (mcd)	Typ. Iv (mcd)	Max. Iv (mcd)	Test Current (mA)	Dice Technology
HSMJ-A100-Q00J1	63.0	100.0	-	20	AlinGaP
HSMJ-A101-S00J1	160.0	200.0	-	20	AlInGaP
HSMV-A100-T00J1	250.0	350.0	-	20	AlinGaP
HSMJ-A100-Q30J1	63.0	-	155.0	20	AlinGaP
HSMJ-A100-R40J1	100.0	-	315.0	20	AlinGaP
HSMJ-A101-R80J1	125.0	-	395.0	20	AlinGaP
HSMV-A100-S80J1	200.0	-	620.0	20	AlinGaP

# Orange

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Part Number	Min. Iv (mcd)	Typ. Iv (mcd)	Max. Iv (mcd)	Test Current (mA)	Dice Technology
HSMD-A100-J00J1	4.0	15.0	-	20	GaP
HSMD-A100-L00J1	10.0	15.0	-	20	GaP
HSMD-A100-J7PJ2	5.0	-	12.5	10	GaP
HSMD-A100-K4PJ2	6.3	-	20.0	10	GaP
HSML-A100-Q00J1	63.0	100.0	-	20	AlinGaP
HSML-A101-S00J1	160.0	220.0	-	20	AlInGaP
HSML-A100-Q7PJ1	80.0	-	200.0	20	AlinGaP
HSML-A100-R7PJ1	125.0	-	315.0	20	AlInGaP
HSML-A101-R8WJ1	125.0	-	395.0	20	AllnGaP

## **Device Selection Guide, continued**

Yellow/Amber						
Part Number	Min. Iv (mcd)	Typ. Iv (mcd)	Max. Iv (mcd)	Test Current (mA)	Dice Technology	
HSMY-A100-J00J1	4.0	12.0	-	20	GaP	
HSMY-A100-L00J1	10.0	12.0	-	20	GaP	
HSMY-A100-J35J2	4.0	-	10.0	10	GaP	
HSMY-A100-K45J2	6.3	-	20.0	10	GaP	
HSMA-A100-Q00J1	63.0	100.0	-	20	AlInGaP	
HSMA-A101-S00J1	160.0	220.0	-	20	AlInGaP	
HSMU-A100-S00J1	160.0	320.0	-	20	AlInGaP	
HSMA-A100-Q35J1	63.0	-	155.0	20	AlInGaP	
HSMA-A100-R45J1	100.0	-	315.0	20	AlInGaP	
HSMA-A101-R8WJ1	125.0	-	395.0	20	AlInGaP	
HSMU-A100-S4WJ1	160.0	-	500.0	20	AlInGaP	

#### Yellow Green

Part Number	Min. Iv (mcd)	Typ. Iv (mcd)	Max. Iv (mcd)	Test Current (mA)	Dice Technology
HSMG-A100-J02J1	4.0	18.0	-	20	GaP
HSMG-A100-K72J2	8.0	-	20.0	10	GaP
HSME-A100-M02J1	16.0	70.0	-	20	AlInGaP
HSME-A100-N82J1	30.0	-	100.0	20	AlInGaP

## **Emerald Green**

Part Number	Min. Iv (mcd)	Typ. Iv (mcd)	Max. Iv (mcd)	Test Current (mA)	Dice Technology
HSMG-A100-H01J1	2.5	8.0	-	20	GaP
HSMG-A100-G31J2	1.6	-	4.0	10	GaP
HSMG-A100-H41J2	2.5	-	8.0	10	GaP
HSME-A100-L01J1	10.0	40.0	-	20	AlinGaP
HSME-A100-M3PJ1	16.0	-	40.0	20	AlinGaP

#### Green

Part Number	Min. Iv (mcd)	Typ. Iv (mcd)	Max. Iv (mcd)	Test Current (mA)	Dice Technology
HSMM-A101-R00J1	100.0	200.0	-	20	InGaN
HSMM-A100-S00J1	160.0	350.0	-	20	InGaN
HSMM-A101-Q7PJ1	80.0	-	200.0	20	InGaN
HSMM-A101-R7PJ1	125.0	-	315.0	20	InGaN
HSMM-A101-R8PJ1	125.0	-	395.0	20	InGaN
HSMM-A100-S8PJ1	200.0	-	620.0	20	InGaN