



A 204lm/w
Ultra high efficiency soft light strip module (12V)

HUS-008SA-012080

LED Module Datasheet

The HIGNTEK HUS-008SA-012080 product is the 2835 series of soft light strips used in ultra-high light efficiency decorative lighting. The product is divided into 12V and 24V, and uses a high light efficiency UHE-2835 led chip to make the module with ultra-high efficiency and brightness. The product adopts flexible PCB, which can be bent appropriately, and the product is equipped with a scissible position, which can be cut arbitrarily without affecting the use of other parts.

FEATURES AND BENEFITS

Efficacy and luminous flux of up to 204lm/W typical and 1020lm available

Available CCT/CRI options: 2700K-6500K(80 & 90 CRI)

Designed to be compatible with standard third party optics

FPCB for high flexibility and excellent electrical performance

CE, ROHS, ERP compliance

5-year limited guarantee

PRIMARY APPLICATIONS

Strip Light

Wall lamp

Decorative lighting



Performance Characteristics

Product Selection Guide

Table 1. Product performance of HIGNTEK HUS-008SA-012080 (IF=417mA/M, T_p=25°C)

NOMINAL CCT	CRI [RA]	CURRENT [mA/M]	FORWARD VOLTAGE [V]	POWER [W/M]	LUMINOUS FLUX [lm/M]		EFFICACY [lm/W/M]	
					T _c = 25° C	T _c = 45° C	T _c = 25° C	T _c = 45° C
2700K	80	417	12	5	938	919	188	184
3000K	80	417	12	5	949	930	190	186
3500K	80	417	12	5	949	930	190	186
4000K	80	417	12	5	1020	1000	204	200
5000K	80	417	12	5	1020	1000	204	200
5700K	80	417	12	5	1020	1000	204	200
6500K	80	417	12	5	1010	990	202	198
2700K	90	417	12	5	826	809	165	162
3000K	90	417	12	5	835	818	167	164
3500K	90	417	12	5	835	818	167	164
4000K	90	417	12	5	898	880	180	176
5000K	90	417	12	5	898	880	180	176
5700K	90	417	12	5	898	880	180	176
6500K	90	417	12	5	889	871	178	174

Notes for Table1:

1. T_c: temperature at which performance is specified measured at "T_c point".
2. HIGNTEK maintains a measurement tolerance of : Luminous flux: ±7 %, CRI: ±3.0.
3. Measurement tolerance of CCT is ±5%.
4. HUS-008SA-012080 Color temperature (2700K-6500K) is optional.

Product Code Information

Table 2. Product Code-HUS-008SA-012080-XXX

CRI [RA]	NOMINAL CCT	PRODUCT CODE
80	2700K	HUS-008SA-012080-278
	3000K	HUS-008SA-012080-308
	3500K	HUS-008SA-012080-358
	4000K	HUS-008SA-012080-408
	5000K	HUS-008SA-012080-508
	5700K	HUS-008SA-012080-578
	6500K	HUS-008SA-012080-658
90	2700K	HUS-008SA-012080-279
	3000K	HUS-008SA-012080-309
	3500K	HUS-008SA-012080-359
	4000K	HUS-008SA-012080-409
	5000K	HUS-008SA-012080-509
	5700K	HUS-008SA-012080-579
	6500K	HUS-008SA-012080-659

Electrical Characteristics

Table 3. Electrical characteristics for HIGNTEK HUS-008SA-012080

PARAMETER	SYMBOL	VALUE			UNIT	REMARK
		MIN.	TYP.	MAX.		
Operating Current	I_F	-	417	-	mA/M	-
Operating Voltage	V_F	-	12.0	-	Vdc	$I_F = 417 \text{ mA/M}$
Power Consumption	P	-	5.0	-	W/M	$T_p = 25^\circ\text{C}$

Notes for Table3:

1. T_p : temperature at which performance is specified measured at "Tc point".
2. HIGNTEK maintains a tolerance of $\pm 0.1\text{V}$ on forward voltage measurements.

Absolute Maximum Ratings

Table 4. Maximum Operating Specification ($T_p=25^{\circ}\text{C}$)

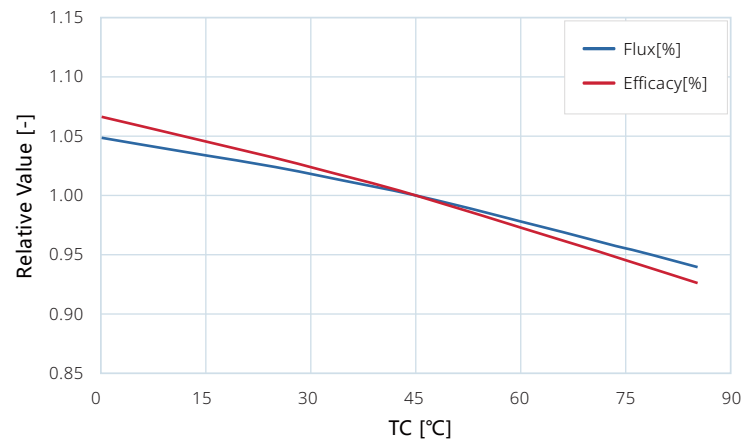
PART NUMBER	PARAMETER	SYMBOL	UNIT	RATING
HUS-008SA-012080-XXX	Power Consumption	P	W/M	40
	DC Forward Current	I_F	mA/M	1500
	Operating Temperature	-	$^{\circ}\text{C}$	-40 to 65
	Storage Temperature	T_{Ctg}	$^{\circ}\text{C}$	-40 to 105
	ESD Sensitivity	-	KV	3
	Beam Angle	$\angle$	$^{\circ}$	120
	IP Grade	-	-	IP20
	Maximum Reverse Voltage	V_{RRM}	V	Module are not designed to be driven in reverse bias

Notes for Table4:

1. T_p : temperature at which performance is specified measured at " T_c point".

Temperature Characteristics (DC12V)

$T_c [^{\circ}\text{C}]$	Flux [%]	Efficacy [%]
85	94	93
65	97	96
45	100	100
25	102	103
0	105	107

Figure 1. Typical normalized Flux and Efficacy vs. T_c temperature for HIGNTEK HUS-008SA-012080 at DC12V.

Mechanical Dimensions

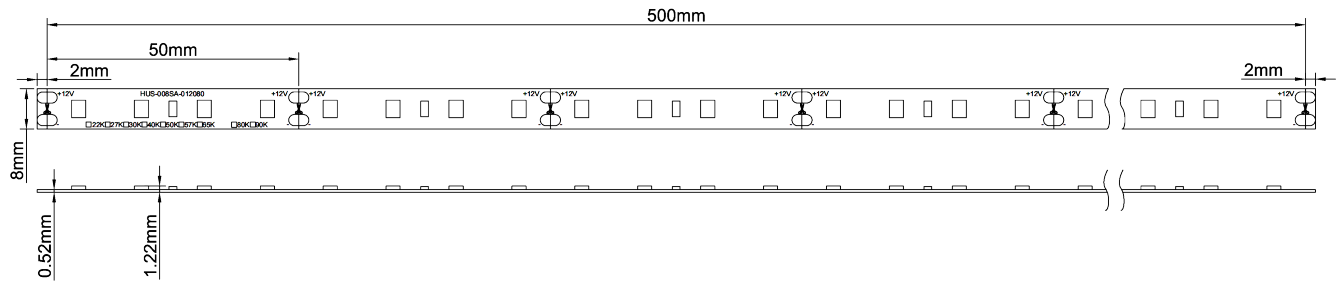
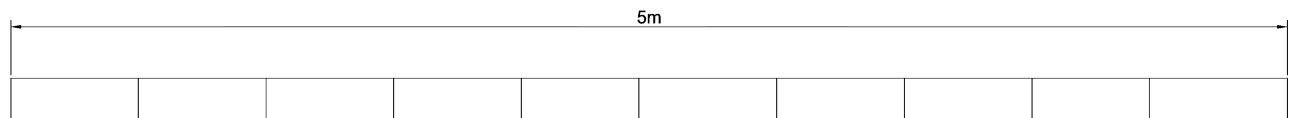


Figure 2. Mechanical Dimensions for HIGNTEK HUS-008SA-012080.



Each disk cascades 5 meters

Figure 3. Packaging Information for HIGNTEK HUS-008SA-012080.

Notes for Figure 3:

1. Drawings are not to scale.
2. All dimensions are in millimeters.

Table 5. Bill of Materials for HIGNTEK HUS-008SA-012080.

COMPONENT	SPECIFICATION PARAMETERS	QUANTITY
LED:2835	UHE-2835 3V	80PCS/M
PCB: FPCB	500*8mm	2PCS/M
SMD Resistance	R:62Ω	20PCS/M

Notes for Table5:

1. Resistance specifications are adjusted according to different power.

Optional Branding (LED)



About HengXinYuan

Hengxinyuan is a professional lighting solutions company that helps customers deliver differentiated solutions to gain and maintain a competitive edge. The company's broad product portfolio includes a wide array of package and device choices such as CREE led, SAMSUNG led, LUMILEDS led, UHE led, Indoor lighting module and Outdoor lighting module. Hengxinyuan's LED products pursue high efficiency, high quality, and high reliability, and aim to meet the needs of customers to the greatest extent. With the supply of high-standard supply chain services as the driving force, they contribute to the development of global LED green and healthy lighting power.