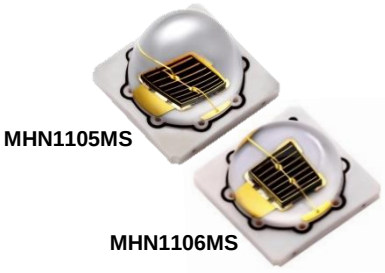
Stanley Electric's Ultra High-Power IR LEDs

Global market leader

in high radiant flux / low thermal resistance



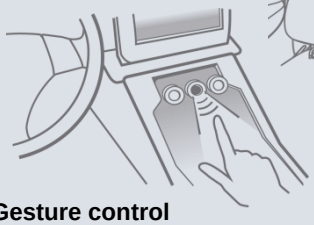
MHN1105MS

MHN1106MS

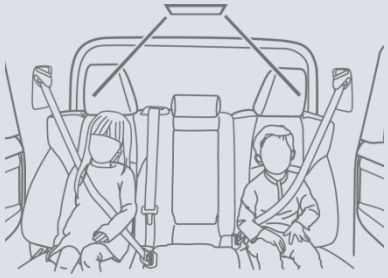
◆Applications

Automotive

DMS
(Driver Monitoring System)

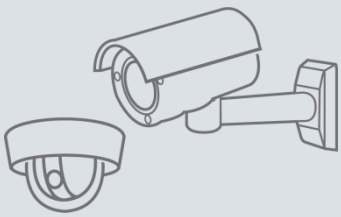


Gesture control



Passenger detection

Security



Surveillance cameras

◆Features

- World-class radiant flux (total luminous flux)
- Low thermal resistance and high reliability technology originally developed for high-power LEDs for headlamps
- Two distribution angles: narrow (60 degrees) / wide (120 degrees)

◆Specifications

RoHS2 Pb-free HEAT

Part name		MHN1105MS	MHN1106MS	Units
Peak wavelength	λp	945	945	nm
Half intensity angle	$2\theta_{1/2}$	60	120	deg.
Radiant intensity	I_e	750	420	mW/sr
Total radiant flux	φ_e	1,630	1,650	mW
Forward voltage	V_F	2.9		V
Max. forward current	I_F	1,000		mA
Pulsed forward current	I_{FRM}	5,000 ※1		mA
Response time	tr/tf	15 / 15		nsec
Operating temperature	Topr	-40 to +125		℃
Storage temperature	Tstg	-40 to +125		℃
Thermal resistance	$Rth_{(j\text{-}s)}$	5 ※2		℃/W
Size	L×W×H	3.8 × 3.8 × 2.8	3.8 × 3.8 × 2.1	mm

Conditions : Ta=25℃ I_F=1,000 mA

※1 Pulsed current conditions : 0.1 ms pulse 1/100 duty
※2 Thermal resistance : Junction-Soldering point

STANLEY ELECTRIC CO., LTD.

This document is issued in October 2021

https://info.stanley.co.jp/public/application/add/64
https://www.stanley-components.com/en/