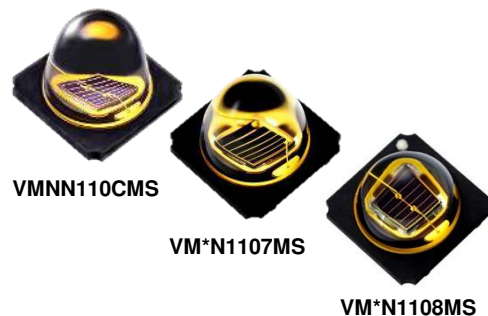




Stanley Electric's Ultra High-Power IR LEDs

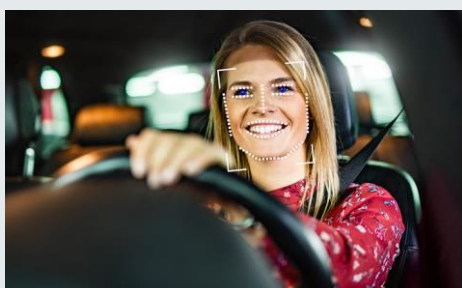
Automotive quality High-power

High radiant flux / low thermal resistance,
high reliability package



◆ Applications

Automotive



DMS (Driver Monitoring System)



Gesture control



OMS (Occupancy Monitoring System)

◆ Features

- Suitable for automotive interior applications (AEC-Q102 compliant)
- Light distribution variations to suit various applications (narrow light distribution 45°, 60° / wide light distribution 120°)
- Industry-leading high luminous efficiency
- Low thermal resistance due to high heat dissipation design

◆ Specifications

● Under Development



品名		● VMNN 110CMS	● VMFN 1107MS	VMHN 1107MS	● VMFN 1108MS	VMHN 1108MS	● VMNN 1108MS	Unit	
Electrical, optical characteristics	Peak wavelength	λ_p	945						nm
	Directivity	$2\theta_{1/2}$	45	60		120			deg.
	Radiation intensity	I_e	1,160	440	750	230	420	470	mW/sr
	Light output	Φ_e	1,700	950	1,630	950	1,650	1,700	mW
	Forward voltage	V_F	2.9	1.5	2.9	1.5	2.9	2.9	V
	Response speed	tr/ta	15 / 15						nsec
Absolute maximum ratings	Max. forward current	I_F	1,000	1,000	1,000	1,000	1,000	1,000	mA
	Pulsed forward current	I_{FRM}	5,000 ※1						mA
	Operating temp.	T_{opr}	-40~+125						°C
	Storage temp.	T_{stg}	-40~+125						°C
Thermal resistance	$R_{th(j-s)}$	5 ※2						°C/W	
Outer dimensions	L×W×H	3.8 × 3.8 × 3.2	3.8 × 3.8 × 2.8		3.8 × 3.8 × 2.1			mm	

Ta=25°C I_F=1,000mA ※1 Pulsed current: 0.1ms pulse 1/100 duty ※2 Thermal resistance: junction-soldered part