## Kingbrightusa



# High-Efficiency IR LED 940nm Wavelength Optimized

### High-Efficiency IR LED

### 940nm Wavelength Optimized

#### **Product Features**

- Industry standard top emitting, right angle, dome lens and subminiature packages
- Low power consumption
- High radiant power and high speed
- Mechanically and spectrally matched to phototransistor
- Viewing angle range from 10° to 160°
- RoHS compliant

#### **Applications**

- Industrial Automation & Robotics
- High-Speed IR Data Transmission
- Surveillance & Security Systems
- Machine Vision & Object Detection
- Remote Control Systems

Part Number	Lens Type	λP (nm)	Po (mW/sr) @100mA		Viewing	Dimensions
			Min.	Тур.	Angle	Dimensions
APT1608SF3C-100MAV	Water Clear	940	8	11	150°	$\begin{array}{c} 0.25(0.01) \\ 0.8(0.031) \\ \hline \\ 1.2(0.047) \\ 1.1(0.043) \\ \hline \\ 1.2(0.047) \\ \hline \\ 1.2(0.0$
APTD1608SF3C-100MAV	Water Clear	940	12	30	120°	$0.6(0.024) 1 0.3(0.012) 0.3(0.012) 2 0.1(0.004) \pm 0.1$
APTD3216SF3C-100MAV	Water Clear	940	80	120	40°	0.6(0.024) 1.6(0.063) 3.2(0.126) Polarity Mark 1 0 2 0.55(0.061) 0.75(0.03) 0.25(0.01) 0.25(0.01) 0.25(0.01)

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940nm Wavelength Optimized



Part Number	Lens Type	λΡ (nm)	Po (m @10 Min.	IW/sr) 0mA Typ.	Viewing Angle	Dimensions
APA3010SF3C-100MAV	Water Clear	940	8	11	160°	$\begin{array}{c} 1 \\ 1(0,039) \\ 0.4(0.016) \\ \hline \\ 2(0,079) \\ 1(0,039) \\ \hline \\ 2(0,079) \\ 1(0,039) \\ \hline \\ 1 \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$
APDA3020SF3C-100MAV	Water Clear	940	55	100	10°	3(0.118) 2.2(0.087) 41.9(0.075) 2(0.079) 41.9(0.075) 2 Polarity mark 0.8(0.031) 0.8(0.031) Polarity mark 2.8(0.11) 1.6(0.063) 1.6(0.063) 1.6(0.02)
APTR3216SF3C-100MAV	Water Clear	940	8	11	140°	$\begin{array}{c} 0.8(0.031) \\ 1.6(0.063) \\ 1 \\ 3.2(0.126) \\ 0.5(0.02) \\ 0.5(0.02) \\ 1 \\ 0 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$

### High-Efficiency IR LED

940nm Wavelength Optimized

Part Number	Lens Type	λP (nm)	Po (mW/sr) @100mA Min. Typ.		Viewing Angle	Dimensions
AM2520SF3C03-100MAV	Water Clear	940	80	120	20°	$\begin{array}{c} 2.5(0.098)\pm0.1\\ \hline 1.1(0.043)\\ \pm 0.125\\ \hline 1.9(0.075)\\ \hline 2\\ \hline 0.5(0.02)\pm0.05\\ \hline 0.5(0.02)\pm0.05\\ \hline 0.5(0.02)\pm0.05\\ \hline 0.5(0.02)\pm0.05\\ \hline 0.5(0.02)\pm0.1\\ \hline 0.15(0.006)\pm0.02\\ \hline 0.15(0.006)\pm0.02\\ \hline 0.15(0.006)\pm0.02\\ \hline 0.15(0.005)\pm0.1\\ \hline 0.15(0$
AM2520SF3C09-100MAV	Water Clear	940	80	120	20°	$\begin{array}{c} 2.5(0.098)\pm0.1 \\ 1.1(0.043) \\ 0.4(0.016) \\ \pm 0.05 \\ 1.4(0.055) \\ \pm 0.6(0.024) \\ 0.6(0.024) \\ 0.13 \text{ Max} \\ 4.5(0.177)\pm0.5 \\ \end{array}$



