

Sensitivity Wavelength Range: 600nm ~ 1750nm

The 1346 series from Marktech, a high sensitivity and high reliability product series, is ideally suited for Optical Communication devices. Custom packaging options for this die are also available.

FEATURES

- > High Speed Response
- > TO-39 Metal Can Package
- > Active Area of 2.0mm / High Sensitivity
- > Spectral Range 600nm -- 1750nm

APPLICATIONS

- > High Speed Optical Communications
- > Optical LAN
- > Optical Switches
- > Ethernet Fiber Channel



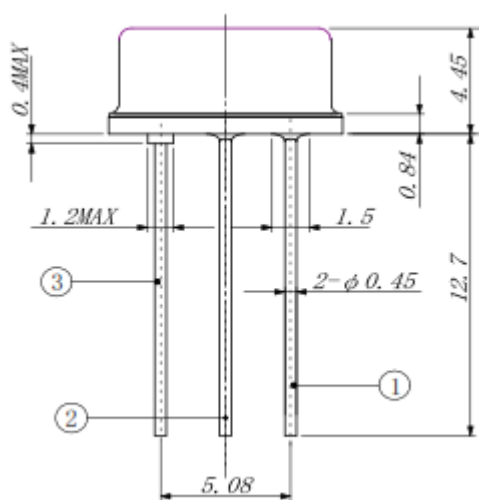
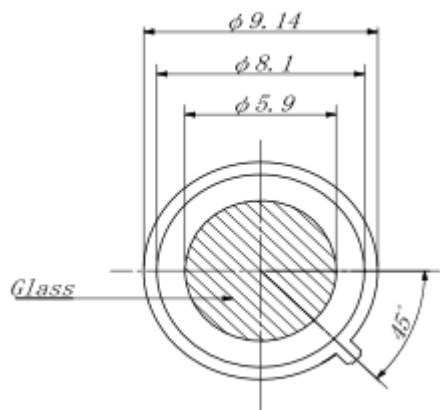
Absolute Maximum Ratings (Ta=25°C)

ITEMS	SYMBOL	RATINGS	UNIT
Active Area	Φ	2.0	mm
Operating Temperature Range	Topr	-40 to +85	°C
Storage Temperature Range	Tstg	-40 to +125	°C

Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Breakdown Voltage	VR	IR=10uA	--	--	5	V
Sensitivity Range	λ	VR=0V	600	--	1750	nm
Dark Current	ID	VR=1V	--	160	--	uA
Capacitance	C	VR=1V; *2	--	--	1260	pF
Responsivity	R	$\lambda=1.6\mu\text{m}$	--	0.57	--	A/W
Shunt Resistance	RS	VR=10mV	--	0.553	--	kOhm
Quantum Efficiency	QE	$\lambda=1.6\mu\text{m}$	--	0.45	--	%
Light Current	IL	$\lambda=1.6\mu\text{m}$; *1	--	17.7	--	μA
Rise and Fall Time	Tr,Tf		--	76	--	ns
Bandwidth	BW		--	7	--	MHz

*1: $E_e=1\text{mW}/\text{cm}^2$ *2: $f=100\text{kHz}/1\text{kHz}$



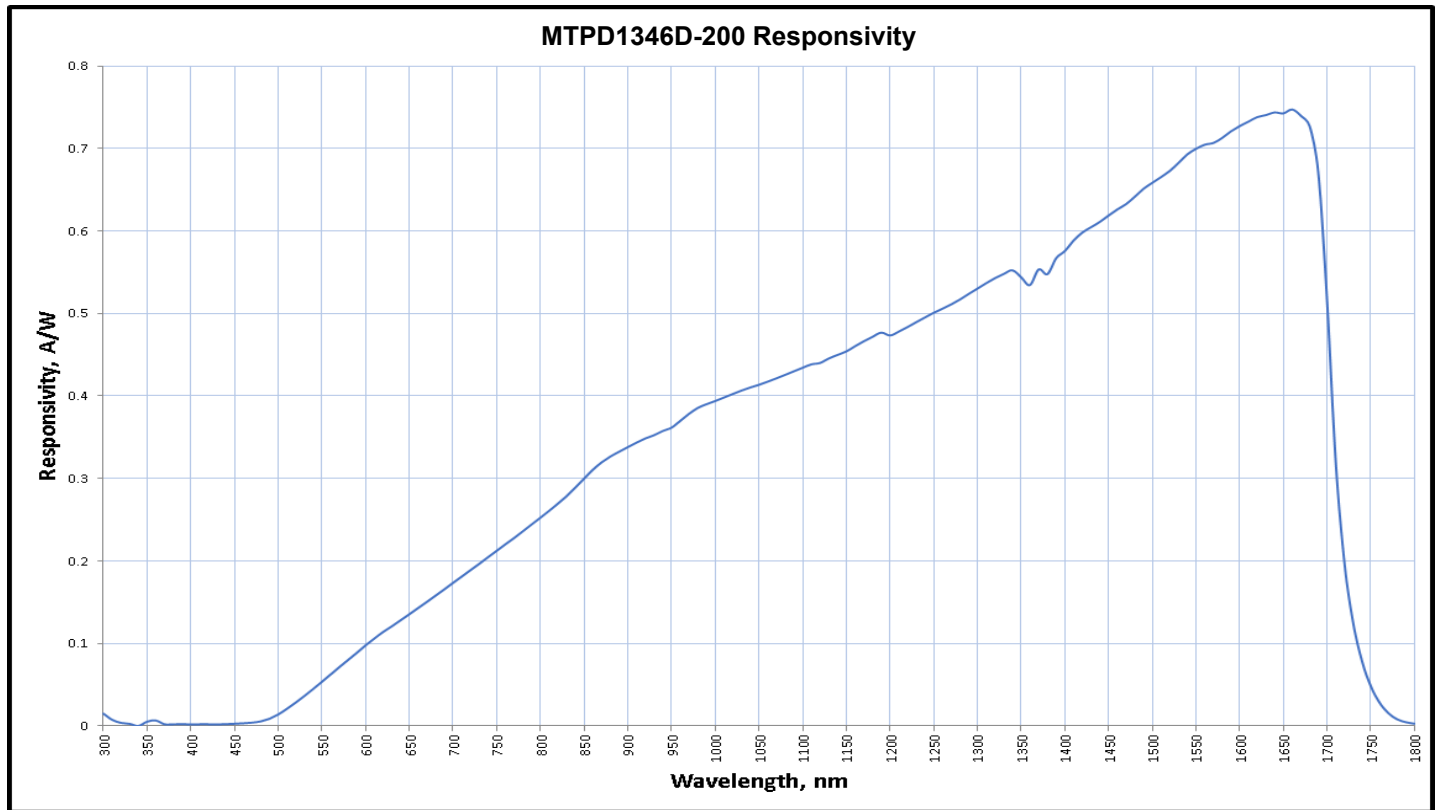
①Cathode ②Anode ③Case

Unit: mm, Tolerance: ± 0.2

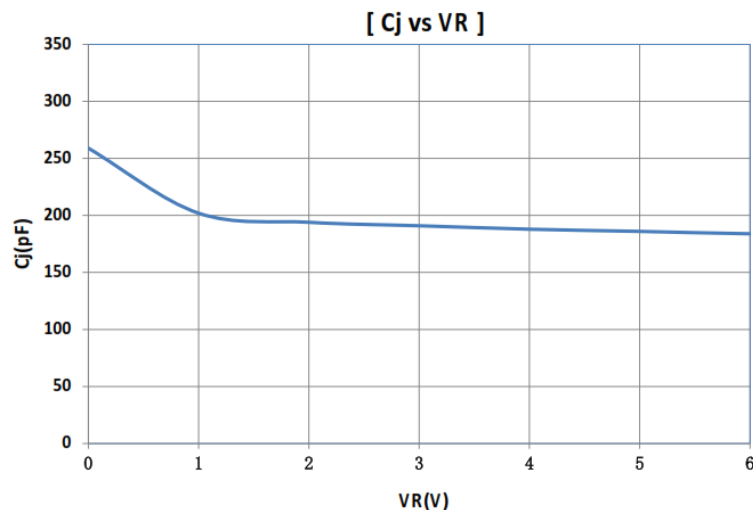
The information contained herein is subject to change without notice.

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Spectral Response Graph



Capacitance vs Reverse Voltage



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