

Sensitivity Wavelength Range: 600nm ~ 1750nm

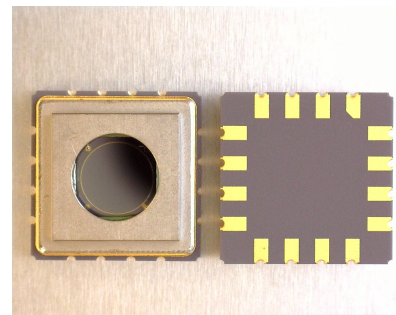
The 1346 series from Marktech, a high sensitivity and high reliability product series, is ideally suited for Optical Communication devices. Custom packaging options for this die are also available.

FEATURES

- > High Speed Response
- > 7.24 x 7.24mm Hermetically Sealed Package
- > Active Area of 3.00mm / High Sensitivity
- > Spectral Range 600nm - 1750nm

APPLICATIONS

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



Absolute Maximum Ratings (Ta=25°C)

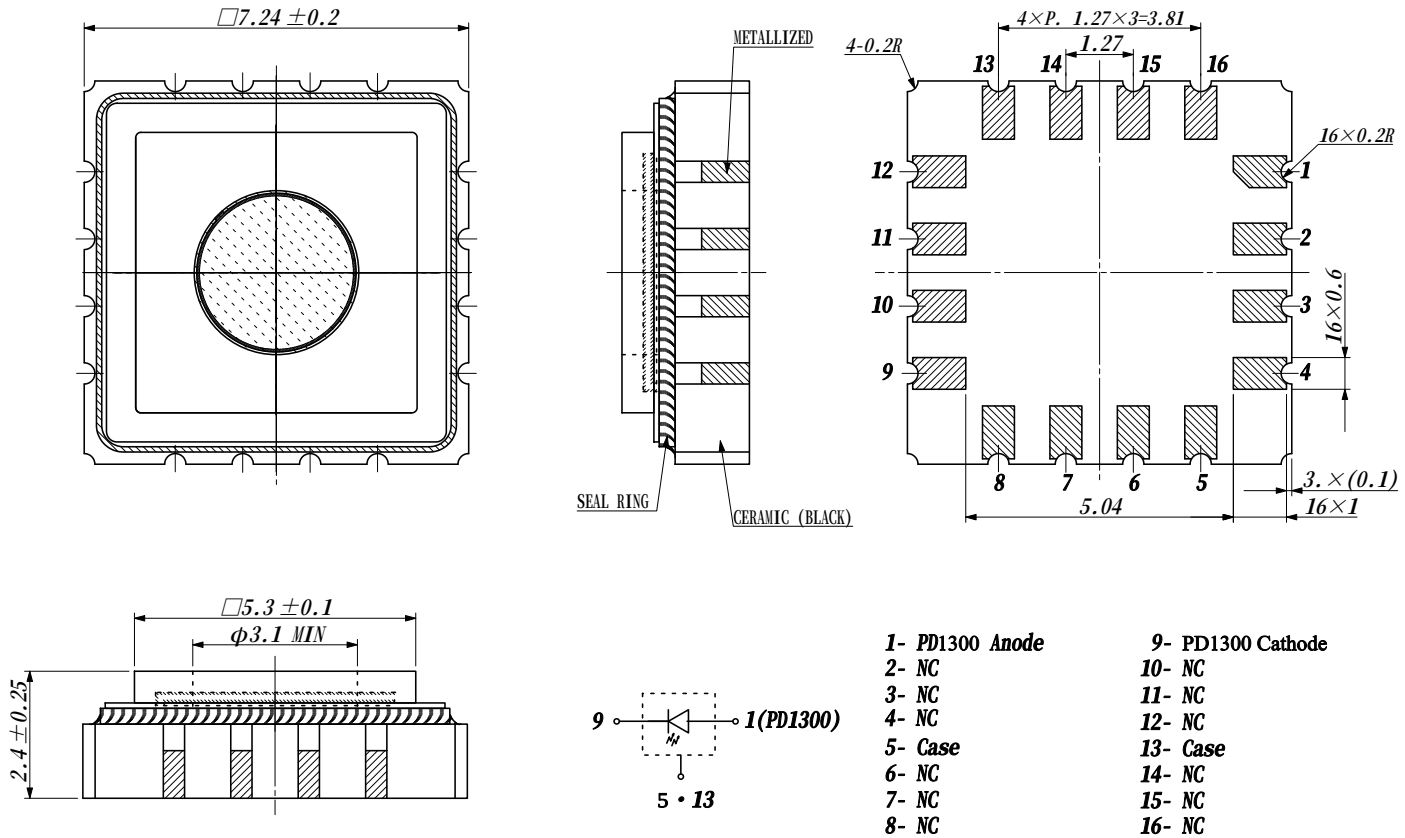
ITEMS	SYMBOL	RATINGS	UNIT
Active Area	Φ	3.0	mm
Operating Temperature Range	Topr	-40 to +85	°C
Storage Temperature Range	Tstg	-40 to +125	°C

Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Breakdown Voltage	VR	IR=10uA	--	--	1	V
Sensitivity Range	λ	VR=0V	600	--	1750	nm
Dark Current	ID	VR=1V	--	265	--	uA
Capacitance	C	VR=1V; *2	--	--	2090	pF
Responsivity	R	$\lambda=1.6\mu\text{m}$	--	0.50	--	A/W
Shunt Resistance	RS	VR=10mV	--	0.360	--	kOhm
Quantum Efficiency	QE	$\lambda=1.6\mu\text{m}$	--	0.40	--	%
Light Current	IL	$\lambda=1.6\mu\text{m}$; *1	--	35.4	--	μA
Rise and Fall Time	Tr,Tf		--	102	--	ns
Bandwidth	BW		--	4.3	--	MHz

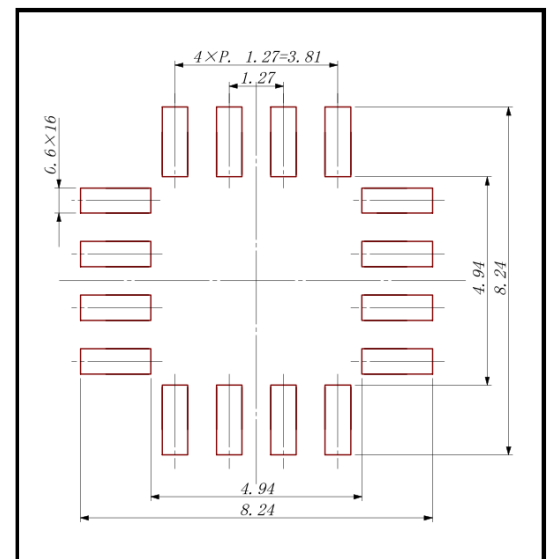
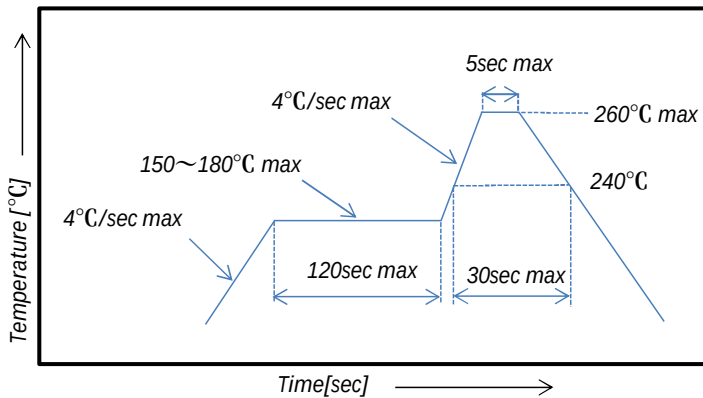
*1: Ee=1mW/cm² *2: f=100kHz/1kHz

Package Dimensions



Recommended Soldering Pattern [mm]

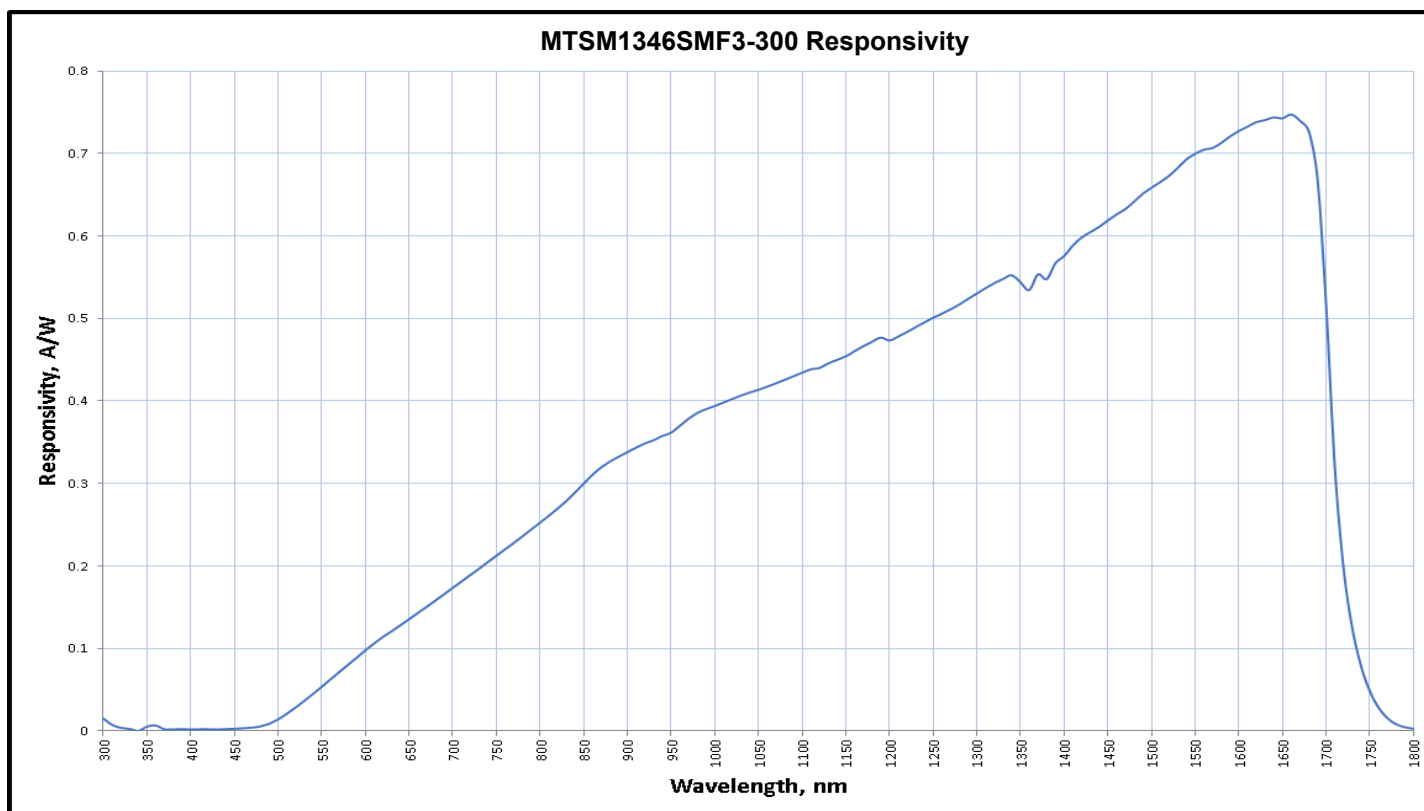
Reflow Soldering Temperature-Profile [Pb free Soldering] (Recommend condition)



The information contained herein is subject to change without notice.

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Spectral Response Graph



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