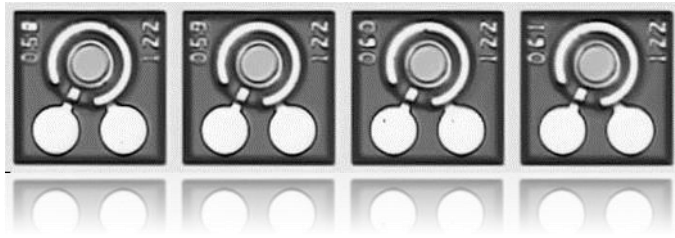


25 Gbps PIN Photodiode 1x1/4/12 chip

- GaAs PIN Photodiode
- 850 nm wavelength
- High speed modulation up to 28 Gbps
- Top side illumination
- 1x1, 1x4, 1x12 chips



PRELIMINARY

ELECTRO-OPTICAL CHARACTERISTICS

Chip temperature = 25°C unless otherwise stated

PARAMETER	SYMBOL	UNITS	MIN	TYP	MAX	TEST CONDITIONS
Responsivity	R	A/W	0.45	0.6	0.75	optical input 1 mW
Active area diameter	d_{act}	μm	38	42	47	
Dark current I	I_{d1}	nA	-1.0	-0.2	0.0	$U_{bias} = -2\text{V}$, optical input 1 mW
Capacitance	C	fF	120	140	160	$U_{bias} = -2\text{V}$, optical input 1 mW
Modulation bandwidth	f_{6dB}	GHz	16	20		50 Ohm load, -6 dB, $U_{bias} = -2\text{V}$
Wavelength range	λ	nm	840		860	
Resistance	R	Ohm	4	8	12	

NOTICE: Stresses greater than those listed under „Absolute Maximum Ratings“ may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other condition beyond those indicated for extended periods of time may effect device reliability.



ATTENTION: Electrostatic Sensitive Devices
Observe Precautions for Handling

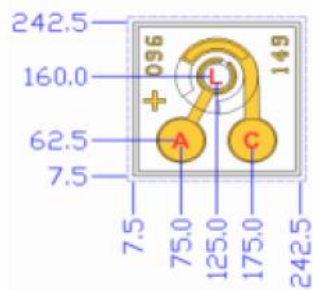
Absolute Maximum Ratings

Storage temperature	-40...140°C
Operating temperature	0...85°C
Continuous forward current	10 mA
Soldering temperature	330°C

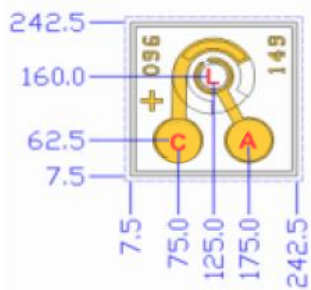
Single Photodiode chip

Description	PD chip, single channel
Type	ULMPIN-25-TT-N0101U
Mounting	anode and cathode wire bonding on front side
Dimensions	235 um x 235 um
Thickness	150 um

ULMPIN-25-TT-N0101U_AC



ULMPIN-25-TT-N0101U_CA



Units: um

- A = Anode pad
- C = Cathode pad (NOT common cathode)
- L = Light sensitive area

Photodiode line arrays

Description	1 x 12 PD line array	1 x 4 PD line array
Type	ULMPIN-25-TT-N0112U	ULMPIN-25-TT-N0104U
Wiring	Electrically separated channels	Electrically separated channels
Dimensions	235 um x 2985 um	235 um x 985 um
Thickness	150 um	150 um



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