

Axial Fiber Optic Isolator

OPI1270 Series



Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Storage Temperature Range (note 4)	-40° C to +80° C
Operating Temperature Range (note 4)	-20° C to +75° C
Lead Soldering Temperature [1/16 inch (1.6 mm) from case for 5 seconds with soldering iron]	260° C ⁽¹⁾
Power Dissipation ⁽²⁾	100 mW

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
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LED (See OVLAS6CB8 for additional information)

V_F	On-State Collector Current	1.2	-	2.3	V	$I_F = 20\text{ mA}$
I_R	Collector-Dark Current	-	-	80	μA	$V_R = 3.0\text{ V}$

SENSOR—Phototransistor (See OP506 for additional information)

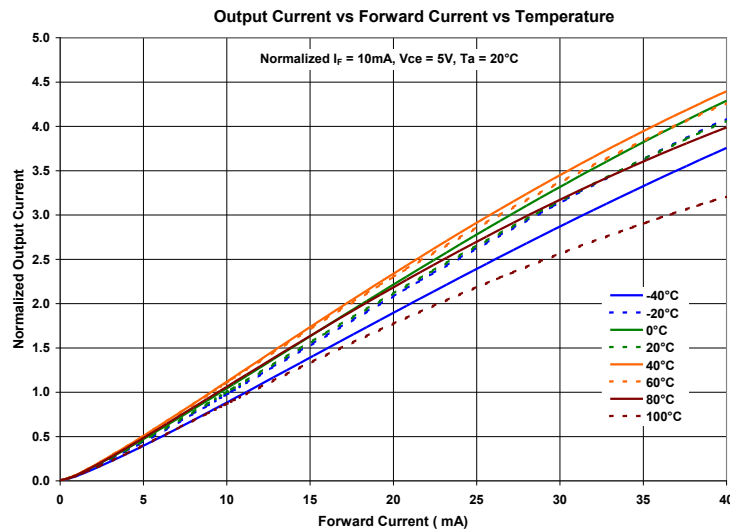
I_{CEO}	Collector Dark Current	-	-	50	nA	$V_{CE} = 10\text{ V}, E_E = 0$
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	33	-	-	V	$I_C = 100\ \mu\text{A}, E_E = 0$
$V_{(BR)ECO}$	Emitter-Collector Breakdown Voltage	5.5	-	-	V	$I_E = 100\ \mu\text{A}, E_E = 0$

COUPLED

$I_{C(ON)}$		0.36	-	-	mA	$V_{CE} = 5\text{ V}, I_F = 10\text{ mA}$
$I_{ISO}^{(3)}$		-	-	1.0	μA	$I @ 7\text{ KV RMS}, 25^\circ\text{ C}, \text{ Test Duration} = 2\text{ sec.}$

Notes:

1. RMA flux is recommended. Duration can be extended to 10 seconds maximum when flow soldering. A maximum 20 grams force may be applied to the leads when soldering.
2. Derate linearly 1.33 mW/° C above 25° C.
3. Isolation voltage testing is required.
4. Storage and Operating temperature values are based on the plastic optical interface temperature ratings. Please reference UL1577 and UL file AVLZ.E89328



General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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