

CN

Photo-couplers

Photocoupleurs - Fotokopplungselemente

TYPE NUMBER	DESCRIPTION Additional information	SUBTYPES (2)	RATINGS AND CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$, unless otherwise stated)				
			Symbol	Value	Unity	min typ max	MEASURING CONDITIONS
CNY42 CNY43	AS CNY22, CNY23 RESPECTIVELY, BUT BASE OF PHOTO-TRANSISTOR NOT ACCESSIBLE Outlines : NS280, but with two outputs only (emitter, collector)						
CNY44 CNY46	PHOTO-COUPLERS ELECTROLUMINESCENT DIODE + NPN PHOTO-TRANSISTOR Outlines : 112A N.B.:GaAs ELECTROLUMINESCENT DIODE	Isolation	I_C/I_F V_{CEsat} t_r, t_f I_{CEO} tension	0,3 0,4 2 100 1500	V μs nA V	min max typ max min	at $I_F = 10\text{ mA}$; $V_{CE} = 10\text{ V}$ at $I_C = 3\text{ mA}$; $I_F = 10\text{ mA}$ at $I_C = 2\text{ mA}$; $V_{CE} = 10\text{ V}$; $R_L = 100\ \Omega$ at $V_{CE} = 15\text{ V}$; $I_F = 0$; $E = 0$
CNY47 CNY47A	PHOTO-COUPLERS GaAs ELECTROLUMINESCENT DIODE + NPN PHOTO-TRANSISTOR Outlines : NS308	Diode Transistor Coupler	I_F V_R P_{tot} V_{CEO} I_C P_{tot} I_C/I_F I_C/I_F V_{CEsat} $V_{r.m.s}$	30 3 100 30 30 150 20 40 0,4 2000	mA V mW V mA % % V V	max max max max max min min max	for CNY47 for CNY47A isolation test voltage
CNY48	SIMILAR TO CNY47 BUT : Outlines : NS308	Diode Transistor Coupler	I_F I_C I_C/I_F V_{CEsat} $V_{r.m.s}$ P_{tot}	60 100 600 1 1500 275	mA mA % V V mW	max max min max max	isolation test voltage diode plus transistor
CQY13	PHOTO-COUPLER CONSISTING OF AN ELECTROLUMINESCENT GaAs DIODE, WHICH CONVERTS THE RECEIVED ELECTRICAL SIGNAL INTO A LUMINESCENT SIGNAL, AND A NPN SI PHOTO-TRANSISTOR WHICH CONVERTS THE LIGHT SIGNAL INTO AN ELECTRICAL SIGNAL Outlines : 112A		I_{out}/I_{in}	0,05		min	at $I_{out} = 1\text{ mA}$
			Isolation tension emitter/receiver Rise time of output signal Fall time of output signal	200 3 2	V μs μs	min typ typ	
CQY80	OPTICALLY COUPLED ISOLATOR EMITTER: GaAs luminescent diode DETECTOR: Si-NPN-EPITAXIAL-PLANAR-PHOTO-TRANSISTOR Outlines : NS308	EMITTER: DETECTOR:	V_{is} P_{tot} V_R I_F P_V T_j V_{ECO} I_C P_V T_j C_k t_d t_r t_{on} t_s t_f t_{off}	4 250 5 60 100 100 5 50 150 100 0,3 1,8 1,6 3,4 0,3 1,7 2	kV mW V mA mW $^{\circ}C$ V mA mW $^{\circ}C$ pF μs S s μs s μs	max max max max max max max max max typ typ typ typ typ typ typ	Power dissipation Power dissipation

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(1) FWHM : Full width, half maximum of pulse
(2) if applicable