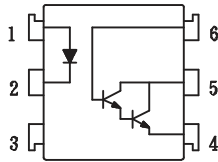


Schematic:



For dimensions and pin-outs, see the last page of this document.

Features:

1. High current transfer ratio  
(CTR:MIN.100% at IF=10mA, Vce=5V)
2. High isolation voltage between input and output  
(Viso:5300Vrms).

Ordering:

Suffix to Standard Part Number

- V = VDE Compliant
- G = 10mm Lead Spread
- S = Surface Mount Lead-form
- T = Tape & Reel

Superior OPTO Part Number:

**OPTO621**

Absolute Maximum Ratings

(Ta=25°C)

Parameter		Symbol	Rating	Unit
Input	Forward current	IF	50	mA
	Peak forward current	IFM	1	A
	Reverse voltage	VR	6	V
	Power dissipation	PD	70	mW
Output	Collector-emitter voltage	VCEO	30	V
	Collector-base voltage	VCBO	30	V
	Emitter-base voltage	VEBO	6	V
	Collector current	IC	150	mA
	Collector power dissipation	PC	200	mW
Total power dissipation		Ptot	200	mW
Isolation voltage 1 minute		Viso	5300	Vrms
Operating temperature		Topr	-30 to +100	°C
Storage temperature		Tstg	-55 to +125	°C
Soldering temperature 10 second		Tsol	260	°C

Electrical Characteristics

(Ta=25°)

Parameter		Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	VF	IF=10mA	—	1.2	1.4	V
	Peak forward voltage	VFM	IFM=0.5A	—	—	3.5	V
	Reverse current	IR	VR=4V	—	—	10	uA
	Terminal capacitance	Ct	V=0, f=1kHz	—	30	—	pF
Output	Collector dark current	ICEO	VCE=10V, IF=0	—	—	0.1	uA
Transfer characteristics	Current transfer ratio	CTR	IF=10mA, VCE=5V	100	—	—	%
	Collector-emitter saturation voltage	VCE (sat)	IF=50mA, IC=50mA	—	—	1.0	V
	Isolation resistance	Riso	DC500V	5X10 <sup>10</sup>	—	—	ohm
	Floating capacitance	Cf	V=0, f=1MHz	—	0.6	1.0	pF
	Cut-off frequency	fc	VCC=5V, IC=2mA, RL=100ohm	—	7	—	kHz
	Response time (Rise)	tr	VCE=10V, IC=50mA, RL=100ohm	—	5	40	us
	Response time (Fall)	tf		—	60	100	us

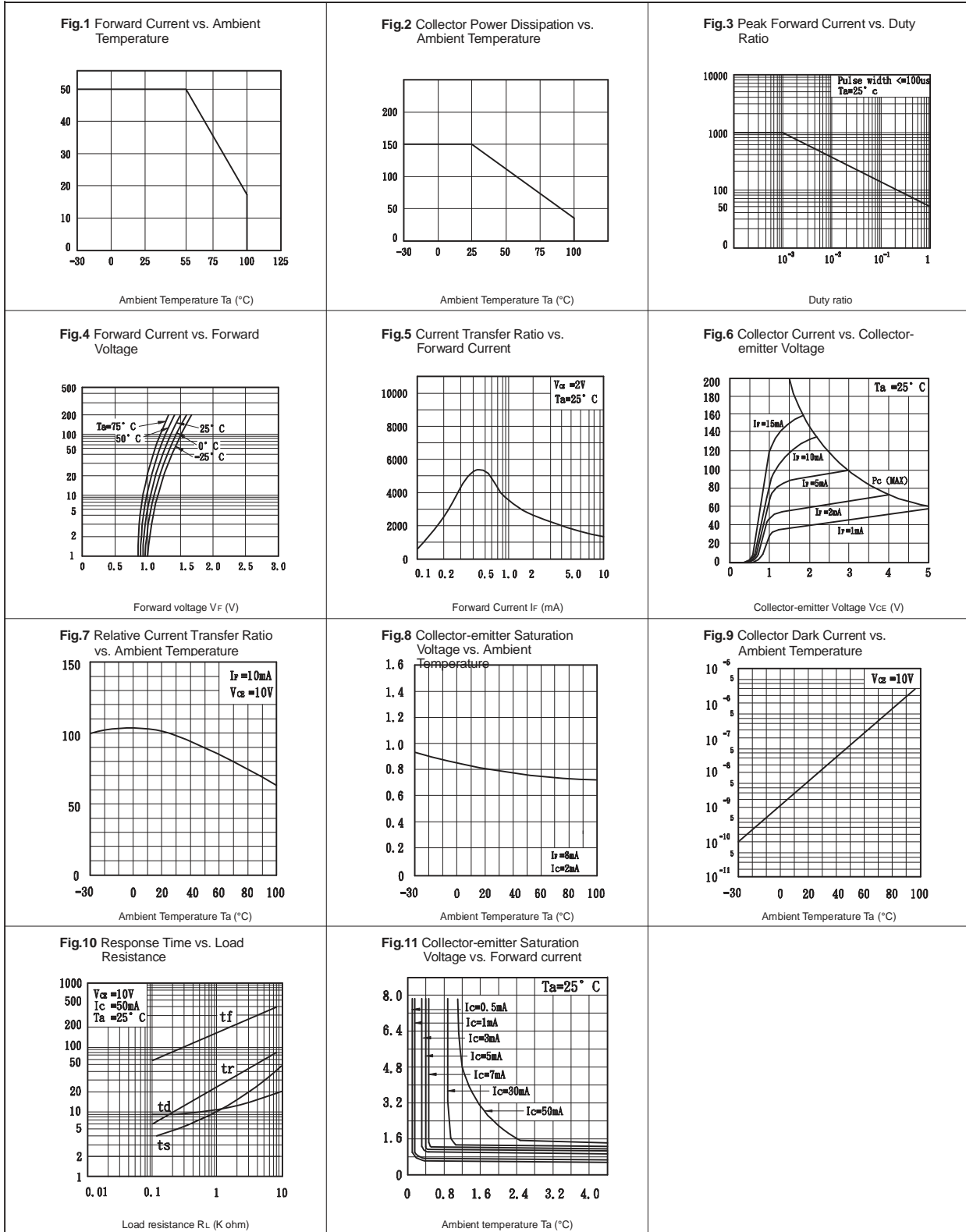


Fig.4 : 6-pin DIP type

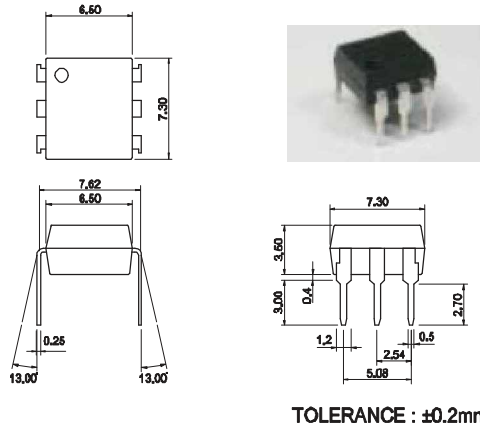


Fig.5 : 6-pin SMD type

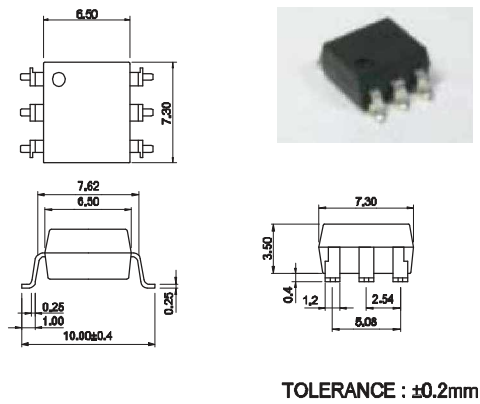


Fig.6 : 6-pin G type

