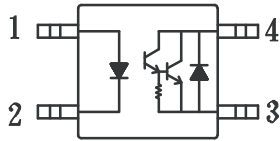


Schematic:



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

Features:

1. Mini-flat package.
2. High collector-emitter voltage ($V_{CEO}:300V$)
3. High current transfer ratio
(CTR:MIN.1000% at $I_F=1mA, V_{CE}:2V$)
4. High isolation voltage between input and output
(Viso:3750Vrms).

Ordering:

Suffix to Standard Part Number

- V = VDE Compliant
- G = 10mm Lead Spread
- S = Surface Mount Lead-form
- T = Tape & Reel
- IS452
- PC452
- PS2732
- TLP127

Equivalents:

This part equals/exceeds all specifications of:

Absolute Maximum Ratings:

(Ta=25°C)

	Parameter	Symbol	Rating	Unit
Input	Forward current	I_F	50	mA
	Peak forward current	I_{FM}	1	A
	Reverse voltage	V_R	6	V
	Power dissipation	P	70	mW
Output	Collector-emitter voltage	V_{CEO}	300	V
	Emitter-collector voltage	V_{ECO}	0.1	V
	Collector current	I_C	150	mA
	Collector power dissipation	P_C	150	mW
Total power dissipation		P_{tot}	170	mW
Isolation voltage 1 minute		V_{iso}	3750	Vrms
Operating temperature		T_{opr}	-55 to +100	°C
Storage temperature		T_{stg}	-55 to +150	°C
Soldering temperature 10 seconds		T_{sol}	260	°C

Electrical Characteristics:

(Ta=25°C)

	Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	V_F	$I_F=10mA$	—	1.2	1.4	V
	Reverse current	I_R	$V_R=4V$	—	—	10	uA
	Terminal capacitance	C_t	$V=0, f=1kHz$	—	30	—	pF
Output	Collector dark current	I_{CEO}	$V_{CE}=200V, I_F=0$	—	—	1	uA
	Collector-emitter breakdown voltage	BV_{CEO}	$I_C=0.1mA, I_F=0$	300	—	—	V
Transfer characteristics	Current transfer ratio	CTR	$I_F=1mA, V_{CE}=2V$	1000	—	—	%
	Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_F=20mA, I_C=100mA$	—	—	1.5	V
	Isolation resistance	R_{iso}	DC500V, 40 TO 60%RH	5×10^{10}	10^{11}	—	ohm
	Floating capacitance	C_f	$V=0, f=1MHZ$	—	0.6	1.0	pF
	Response time (Rise)		$V_{CE}=2V, I_C=20mA, R_L=100ohm$	—	100	300	us
Response time (Fall)	t_f	—		20	100	us	

