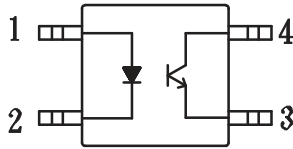


### Schematic:



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

### Features:

1. Opaque type, mini-flat package.
2. Current transfer ratio (CTR:MIN.50% at  $I_F=5mA$ ,  $V_{ce}=5V$ )
3. Isolation voltage between input and output (Viso:3750Vrms).

### CTR Classification Table:

MODEL #	CTR %
A	80 to 106
B	130 to 260
C	200 to 400
D	300 to 600

### Equivalents:

This part equals/exceeds all specifications of:

- IS357
- PC357
- PS2701
- TLP121/181

### 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	$V_{CEO}$	60	V
	Emitter-collector voltage	$V_{ECO}$	5	V
	Collector current	$I_C$	50	mA
	Collector power dissipation	$P_C$	150	mW
Total power dissipation		$P_{tot}$	170	mW
Isolation voltage 1 minute		Viso	3750	Vrms
Operating temperature		$T_{opr}$	-30 to +100	°C
Storage temperature		$T_{stg}$	-40 to +125	°C
Soldering temperature 10 seconds		$T_{sol}$	260	°C

### Electrical Characteristics:

(Ta=25°C)

Parameter		Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	$V_F$	$I_F=20mA$	—	1.2	1.4	V
	Reverse current	$I_R$	$V_R=4V$	—	—	10	uA
	Terminal capacitance	$C_t$	$V=0, f=1kHz$	—	30	250	pF
Output	Collector dark current	$I_{CEO}$	$V_{CE}=20V, I_F=0$	—	—	0.1	uA
	Collector-emitter breakdown voltage	$BV_{CEO}$	$I_C=0.1mA, I_F=0$	60	—	—	V
	Emitter-collector breakdown voltage	$BV_{ECO}$	$I_E=100uA, I_F=0$	5	—	—	V
Transfer characteristics	Current transfer ratio	CTR	$I_F=5mA, V_{CE}=5V$	50	—	600	%
	Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_F=20mA, I_C=1mA$	—	0.1	0.3	V
	Isolation resistance	Riso	DC500V, 40 to 60%RH	$5 \times 10^{10}$	$10^{11}$	—	ohm
	Floating capacitance	$C_f$	$V=0, f=1MHz$	—	0.6	1.0	pF
	Response time (Rise)	$t_r$	$V_{CE}=2V, I_C=2mA, R_L=100ohm$	—	5	20	us
	Response time (Fall)	$t_f$		—	4	20	us

