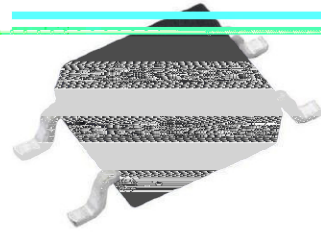


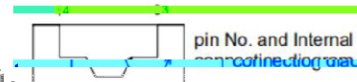
### 1. Features

- Current transfer ratio(CTR : MIN. 50% at  $I_E = 5mA$   $V_{CE} = 5V$   $T_a=25^{\circ}C$ )
- High input -output isolation voltage ( $V_{iso}=3,750V_{rms}$ )
- High collector-emitter voltage ( $V_{CEO} = 80V$ )
- PNP Transistor
- TO-18 package
- In compliance with RoHS (REACH) standards
- MSLS Class



### 2. INTRODUCTION

- The OR-357 series device consists of an infrared led, bipolar transistor, detector. They are enclosed in a plastic TO-18 package.
- The pin out of OR-357 is as follows.



### 3. Application

- Substrate that is made from a high quality industrial grade principle controllers
- System, assistance, measuring instruments

### 4. Absolute Maximum Ratings (Value Temperature = 25°C)

Parameter	Symbol	Value	Unit
Forward Current	$I_F$	50	mA
Reverse Voltage	$V_R$	80	V
Consume Power	P	70	mW
Collector and emitter voltage	$V_{CE}$	80	V
Collector Consume Power	$P_C$	100	mW
Total Consume Power	$P_{tot}$	200	mW
1 Insulation Voltage	$V_{iso}$	3750	$V_{rms}$
Working Temperature	$T_{opr}$	-55 to + 110	°C
Deposit Temperature	$T_{stg}$	-55 to + 125	
2 Soldering Temperature	$T_{sol}$	260	



- \*1. AC Test, 1 minute, humidity = 40~60%  
Insulation test method as below:  
(1) Short circuit both terminals of photo coupler.  
(2) No Current when testing insulation voltage.  
(3) Adding sine wave voltage when testing.
- \*2. soldering time is 10 seconds.

### 5. Opto-electronic Characteristics

Parameter		Symbol	Min	Typ.*	Max	Unit	Condition
Input	Forward Voltage	$V_F$	---	1.2	1.4	V	$I_F=20mA$
	Reverse Current	$I_R$	---	---	5	$\mu A$	$V_R=5V$
	Collector capacitance	$C_t$	---	30	250	pF	$V=0, f=1KHz$
	Collector to emitter Current	$I_{CEO}$	---	---	100	nA	$V_{CE}=20V,$
	Collector to Emitter Breakdown Voltage	$BV_{CEO}$	80	---	---	V	$I_C=0.1mA$ $I_F=0mA$
	Collector to Collector Breakdown Voltage	$BV_{ECO}$	7	---	---	V	$I_E=0.1mA$ $I_F=0mA$
Transforming Characteristics	Current conversion ratio	$\beta$	---	---	---	---	$I_C=1mA$
	Insulation Impedance	$R_{iso}$	$5 \times 10^{10}$	$1 \times 10^{11}$	---	$\Omega$	DC500V 40~60%R.H.
	Floating Capacitance	$C_f$	---	0.6	1	pF	$V=0, f=1MHz$
	Propagation delay time	$t_{pd}$	---	4	19	$\mu s$	$V_{CC}=2V,$ $I_C=2mA,$ $R_L=100\Omega$

\*1. 100%

