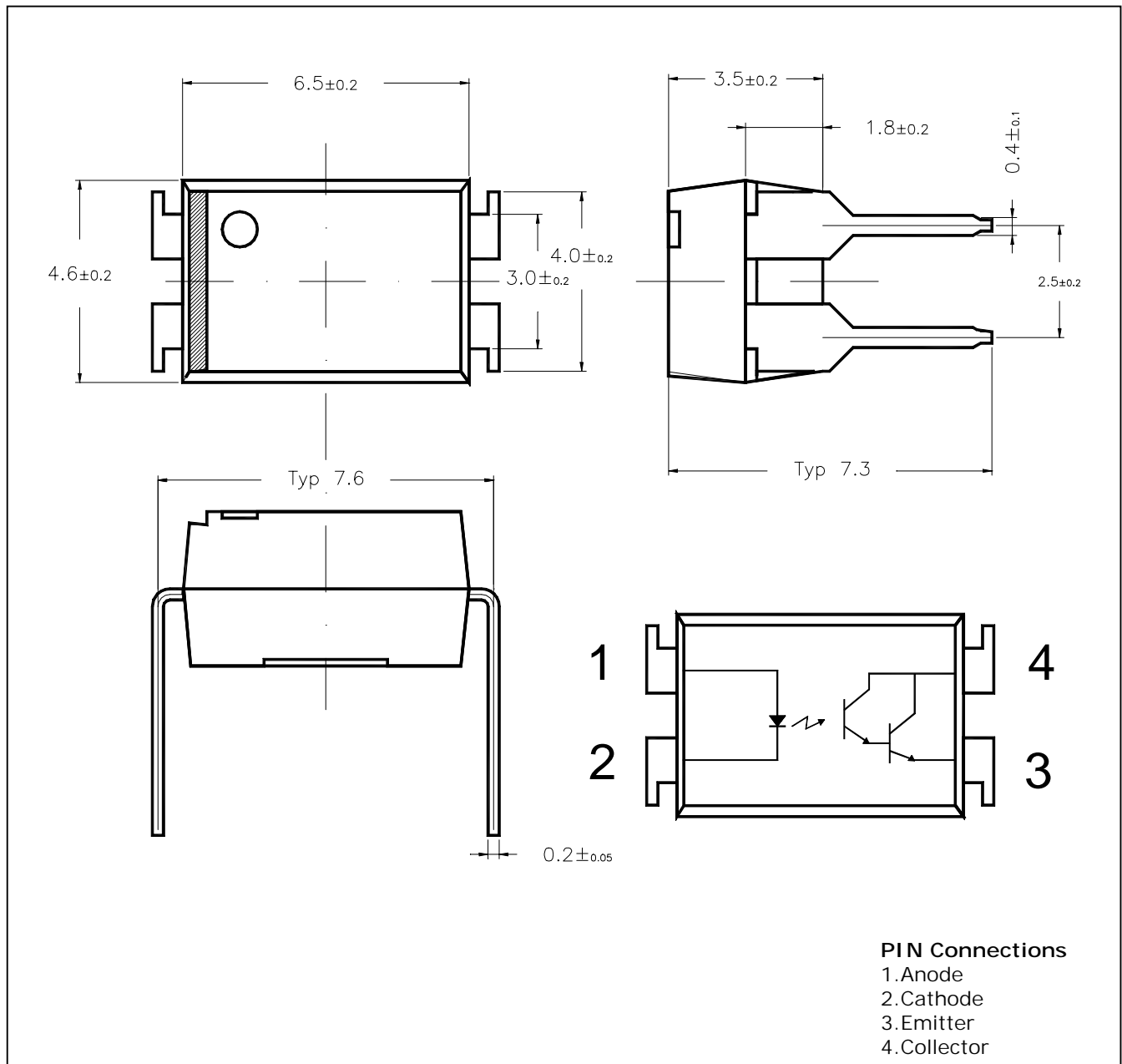


**Features**

- Office machine
- AC/DC input module
- Telecommunication
- Programmable controller
- Power supply

**Outline Dimensions**

**unit : mm**



**PIN Connections**  
 1. Anode  
 2. Cathode  
 3. Emitter  
 4. Collector

## Absolute maximum ratings

(Ta=25)

Characteristic		Symbol	Ratings	Unit
IRED	Continuous Forward Current	$I_F$	50	mA
	Reverse Voltage	$V_R$	5	V
	Power Dissipation	$P_D$	70	mW
Detector	Collector-Emitter Voltage	$V_{CEO}$	35	V
	Emitter-Collector Voltage	$V_{ECO}$	6	V
	Collector Current	$I_C$	50	mA
	Power Dissipation	$P_D$	150	mW
Coupler	Operating Temperature	$T_{opr}$	-30~100	
	Storage Temperature	$T_{stg}$	-55~125	
	Soldering Temperature	$T_{sol}$	260 within 10 seconds	
	*1Isolation Voltage	$V_{iso}$	2,500	$V_{rms}$

\*1.Measured at RH = 40 ~60% for 1 min

## Electrical Characteristics

Parameter		Symbol	Test Condition	Min.	Typ.	Max.	Unit
IRED	Forward Current	$V_F$	$I_F=10mA$	-	1.15	1.3	V
	Reverse Current	$I_R$	$V_R=5V$	-	-	10	uA
	Capacitance	$C_T$	$V=0V, f=1MHz$	-	30	-	pF
Detector	Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=0.5mA$	35	-	-	V
	Emitter-Collector Breakdown Voltage	$BV_{ECO}$	$I_E=10uA$	6	-	-	V
	Collector Dark Current	$I_{CEO}$	$I_F=0mA, V_{CE}=10V$	-	-	1	uA
	Capacitance	$C_{CE}$	$V_{CE}=0, f=1MHz$	-	10	-	pF
Coupler	Current Transfer Ratio	CTR	$I_F=1mA, V_{CE}=2V$	300	-	-	%
	Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_F=20mA, I_C=5mA$	-	0.6	0.9	V
	Input-Output Capacitance	$C_{I-O}$	$V=0V, f=1MHz$	-	0.8	-	pF
	Isolation Resistance	$R_{iso}$	DC 500V 40~60% RH	-	$10^{11}$		$\Omega$
Switching Time	Rise Time	$t_r$	$V_{CC}=5V, R_L=100\Omega$ $I_C=2mA$	-	60	300	usec
	Fall Time	$t_f$		-	60	250	

Characteristic Diagrams

Fig. 1  $I_F - V_F$

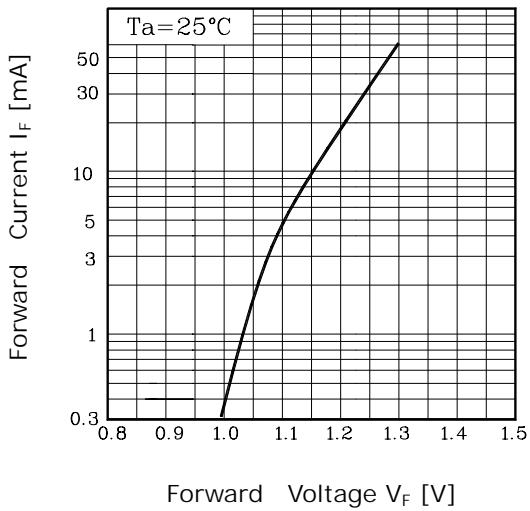


Fig. 2 CTR -  $I_F$

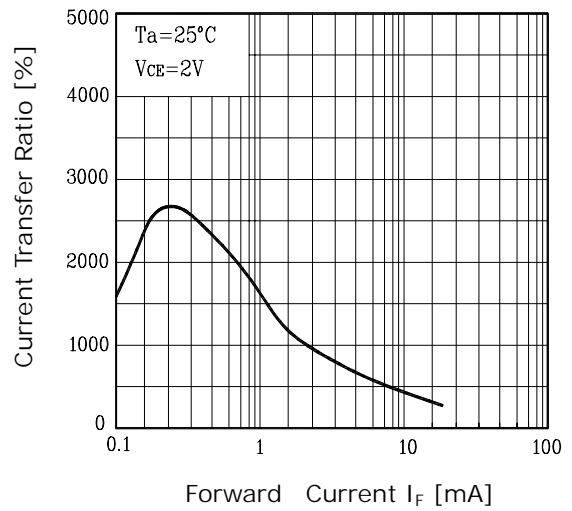


Fig. 3  $I_F - T_a$

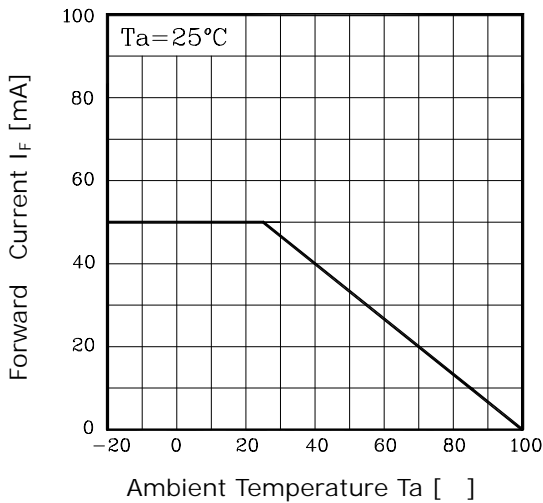


Fig. 4  $P_D - T_a$

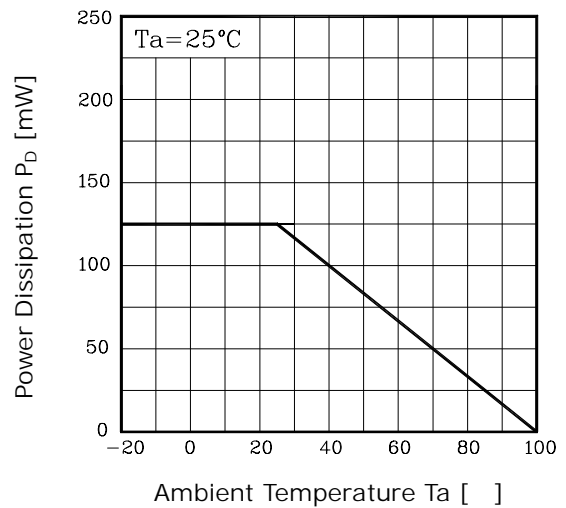


Fig. 5  $I_{CEO} - T_a$

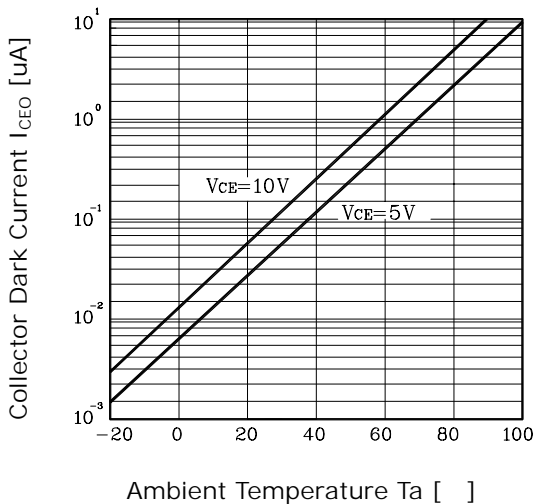


Fig. 5  $I_C - T_a$

