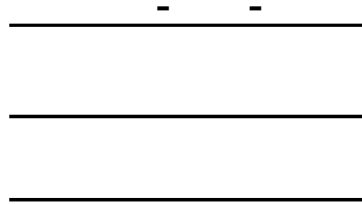




# ORIENT

## Photo coupler

### Product Data Sheet



#### 一级代理商：

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TEL：0755-29563634

FAX：0755-27447020

[www.frxelec.com](http://www.frxelec.com)



**1. Features**

□ ( ) . % , ,  
 . - . ( , )  
 . □ ( ) -  
 . ,  
 .

**2. Instructions**

- -  
 □ . - ,

**3. Application Range**

( ).  
 ( ).  
 ( ). ,

**4. Max Absolute rated Value (Normal Temperature=25 )**

	( )		
*			
		- +	
		- +	
*			

\* . , . . %

(1)

(2)

(3)

\* .



5. Opto-electronic Characteristics(Normal Temperature=25 )

Parameter	Symbol	Min	Typ.*	Max	Unit	Condition
Input		---	.	.		
		---		---		,
		---	---			, □
Output						



## 6. Rank table of current transfer ratio CTR

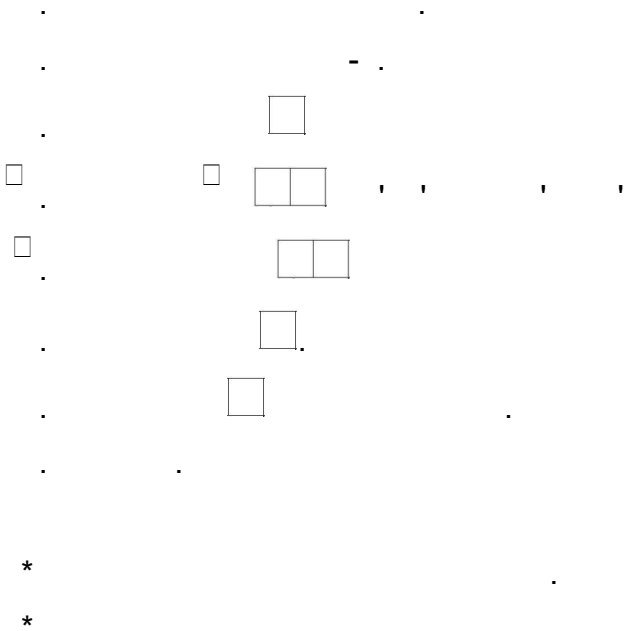
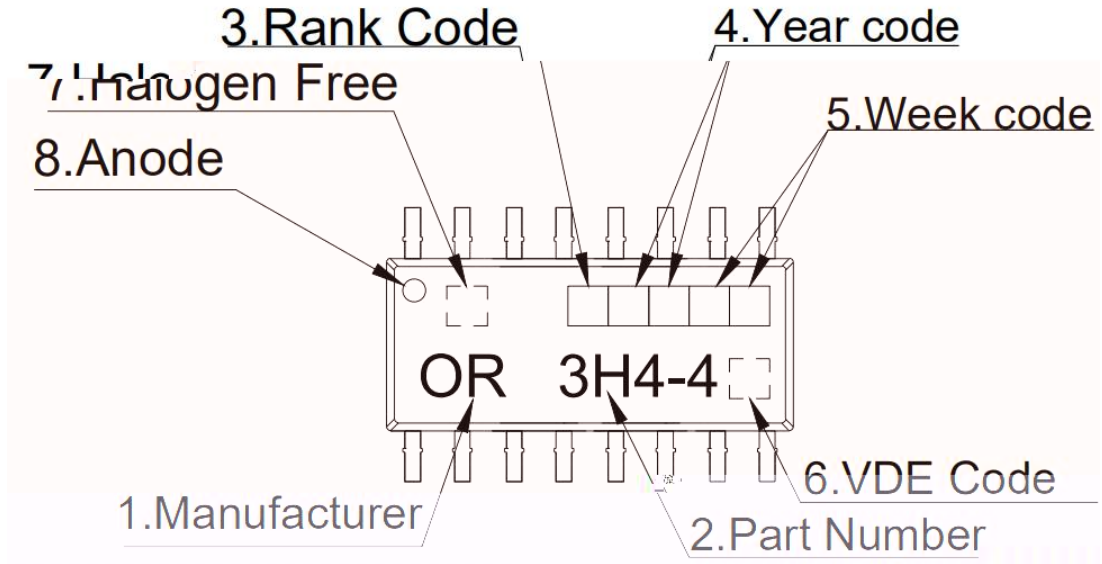
- Current Conversion Ratio =  $I_C / I_F \times 100\%$

## 7. Order Information

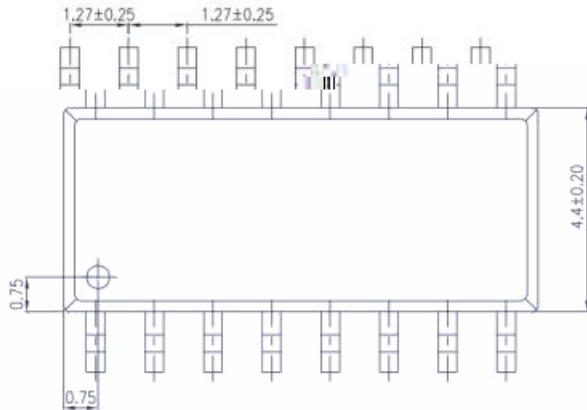
Part Number

**OR-3**

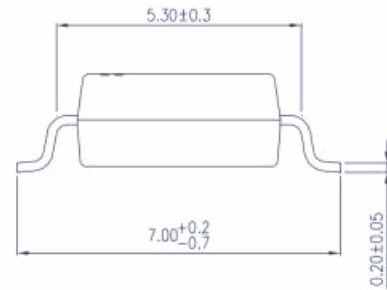
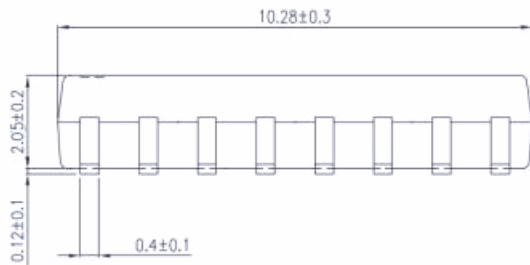
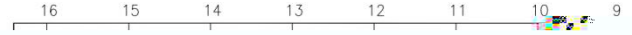
## 8. Naming Rule



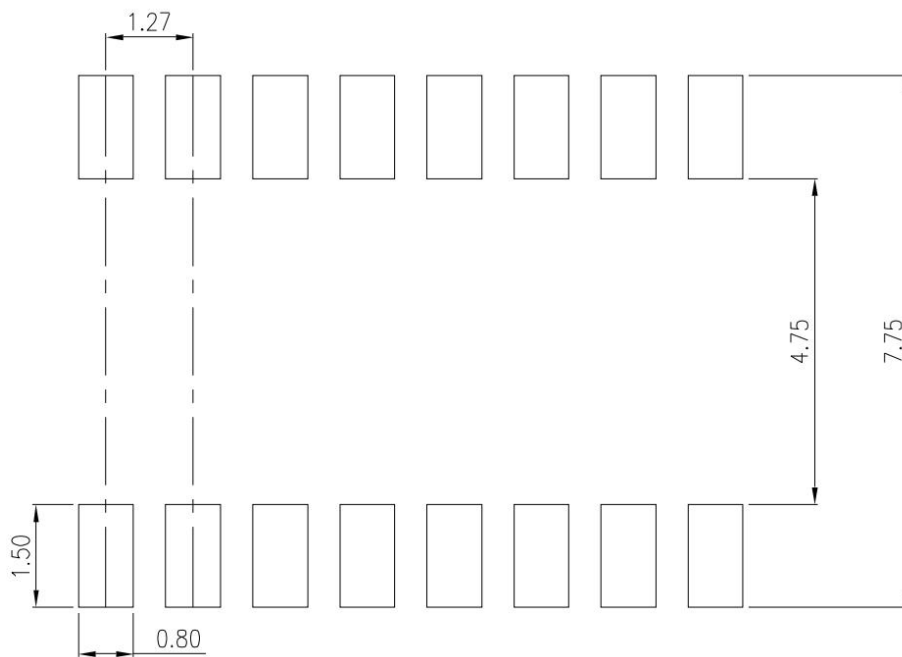
### 9. Outer Dimension



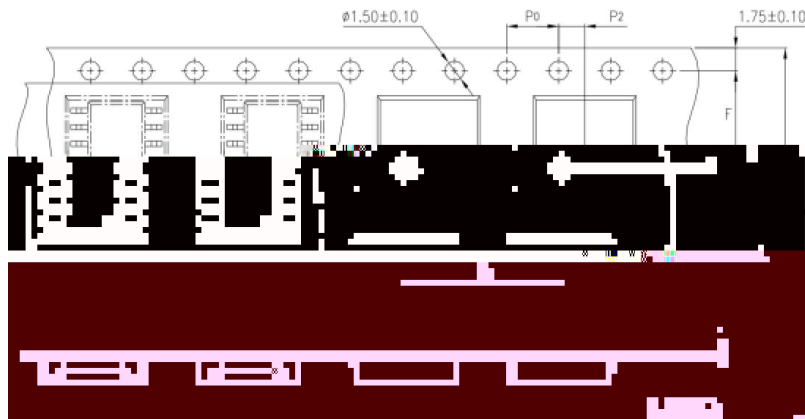
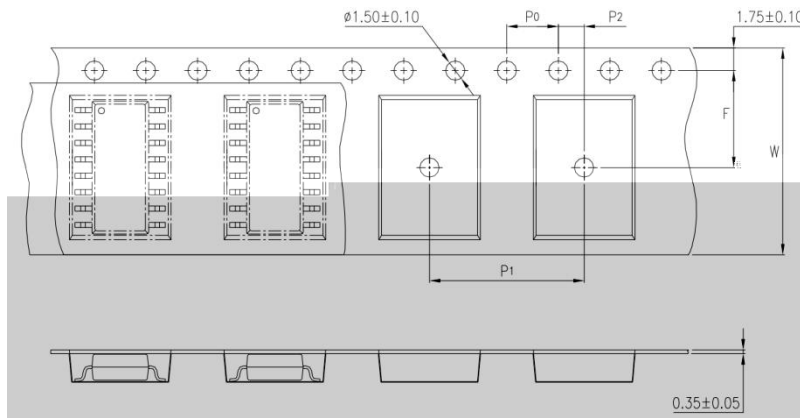
PIN NO. AND INTERNAL CONNECTION DIAGRAM



### 10. Recommended Foot Print Patterns (Mount Pad) (Unit:mm)



## 11. Taping Dimensions



type	Symbol	Dimensions: mm (in.)
bandwidth h	W	16±0.3 (0.47)
pitch	P0	4±0.1 (0.15)
pitch	F	7.5±0.1 (0.217)
	P2	2±0.1 (0.079)
interval	P1	12±0.1 (0.315)

Encapsulation type	TA1/TA
Quantity (pieces)	2000

## 12. Package Dimension

Packing Information	
Packing type	Reel type
Tape Width	16mm
Qty per Reel	2000
Small box (inner) Dimension	345*345*60mm
Max qty per small box	4000
Large box (Outer) Dimension	620*360*360mm
Max qty per large box	40000



1. MTL NO:Contents with "Order Information" in the specification.
2. LOT NO:The production cycle of the product.
3. BATCH:The CTR RANK of the product.
4. Quantity:Product packaging quantity.
5. Product Data: The data when product be made.



### 13. Reliability Test

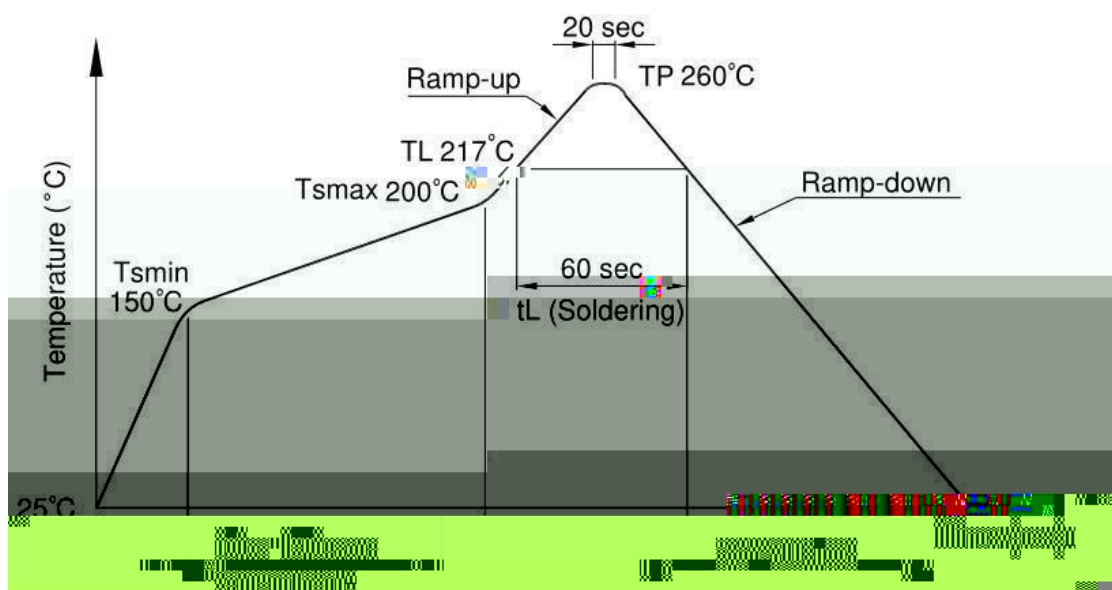
#### Reliability Testing

NO.	ITEMS	QTY. (Pcs)	Condition	Process	Standard
1	RSH	260	5	10s/3 times 168 hrs	JESD22-A106
2	HTSL	125		500 hrs 1000 hrs 168 hrs	JESD22-A103
3	LTSL	-55		500 hrs 1000 hrs	JESD22-A119
4	TC		H:125 15min 5min L:-55 15min	300 cycle	JESD22-A104
5	TS		H:100 5min 15s L:-40 5min	300 cycle	JESD22-A106

### 14. Temperature Profile Of Soldering

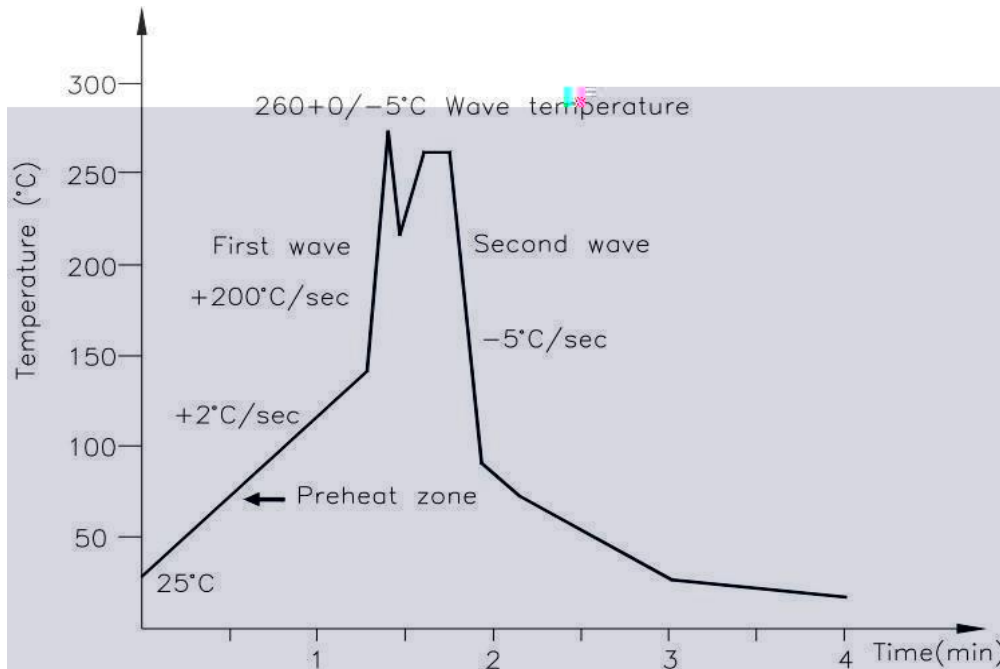
#### 1 IR Reflow soldering (JEDEC-STD-020C compliant)

Profile item	Conditions
- ( )	
- ( )	
- ( ) ( )	
- ( )	
- ( )	
-	
-	
-	
-	
-	
-	



**2 Wave soldering (JEDEC22A111 compliant)**

	+ -



**3 Hand soldering by soldering iron**

Temperature	380+0/-5°C
Time	3 sec max

### 15. Characteristics Curve

Figure 1. Collector Power Dissipation vs. Ambient Temperature

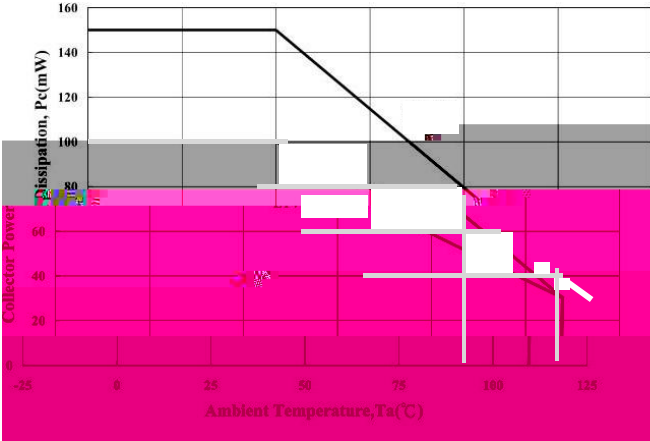


Figure 2. Forward Current vs. Ambient Temperature

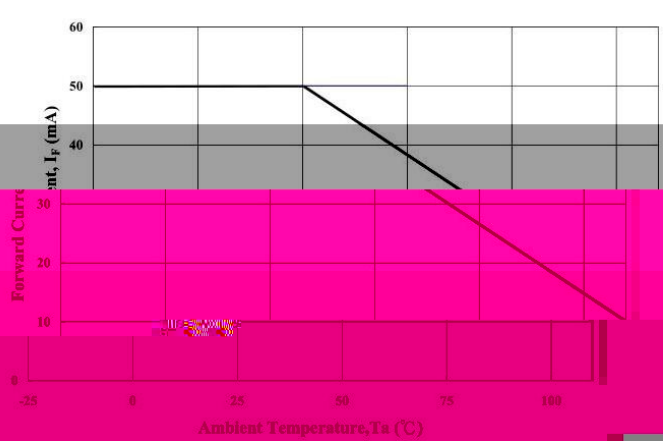


Figure 3. Forward Current vs. Forward Voltage

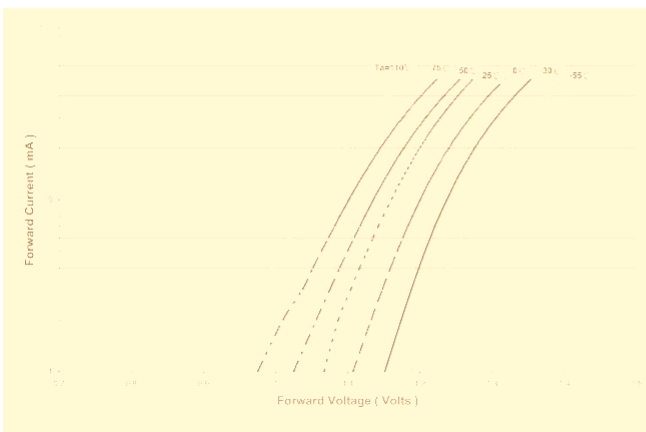


Figure 4. Forward Voltage Temperature Coefficient vs. Forward Current

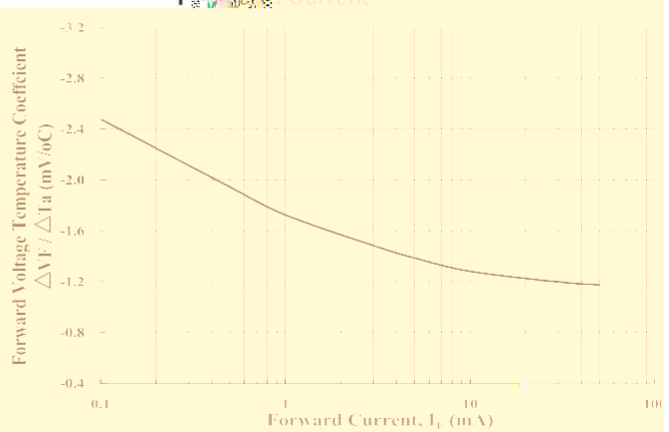


Figure 5. Pulse Forward Current vs. Duty Cycle Ratio



Figure 6. Pulse Forward Current vs. Pulse Forward Voltage

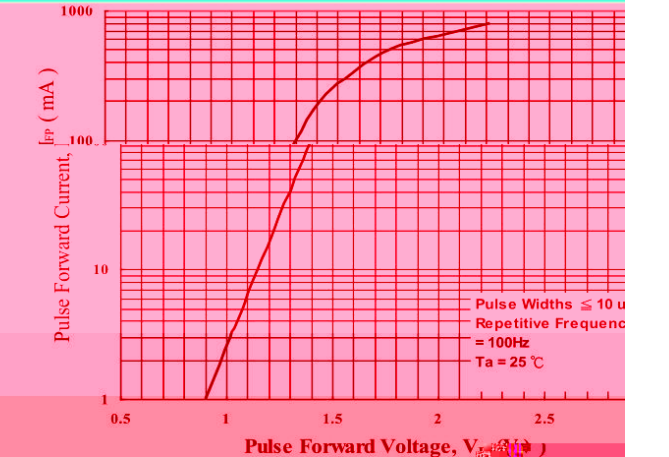


Figure 7. Collector-Emitter Saturation Voltage vs. Forward Current

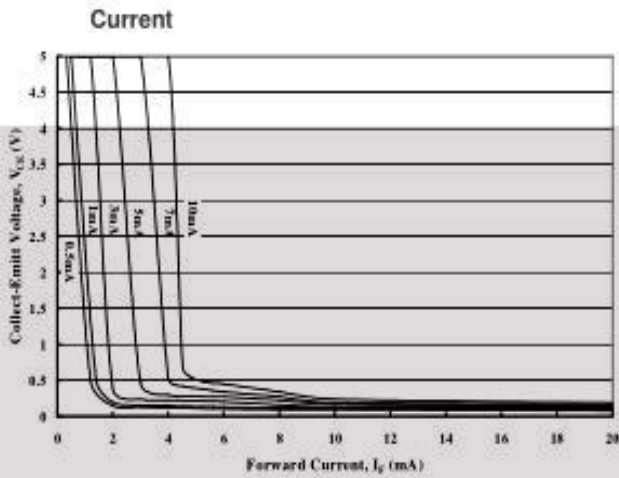


Figure 8. Collector Current vs. Collector-Emitter

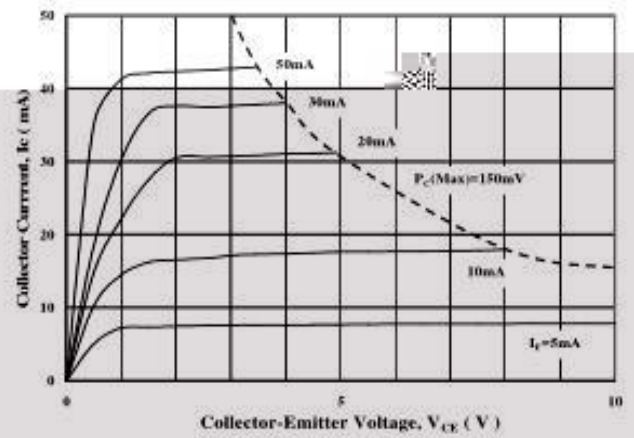


Figure 9. Collector Current vs. Small Collector-Emitter Voltage

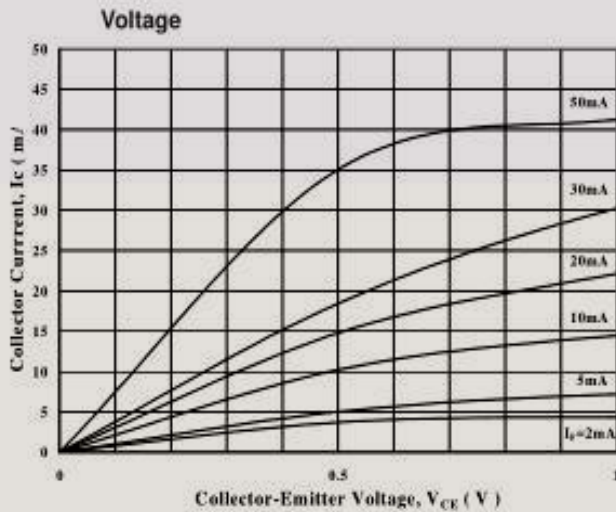


Figure 10. Normalized CTR vs. Forward Current

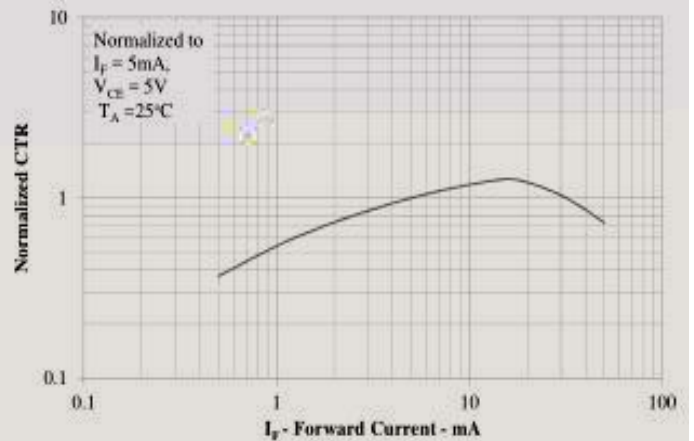


Figure 11. Collector Dark Current vs. Ambient Temperature

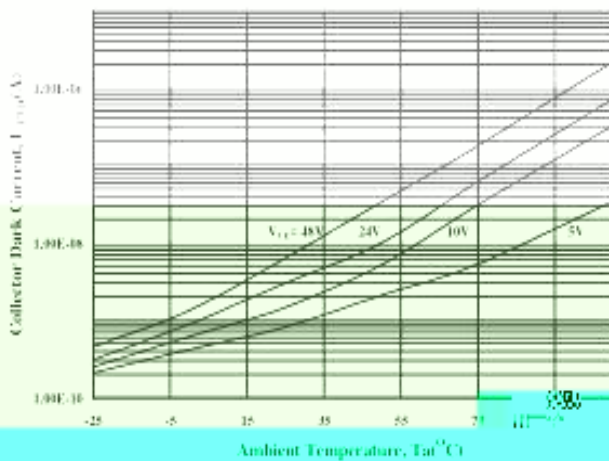


Figure 12. Current Transfer Ratio vs. Forward Current

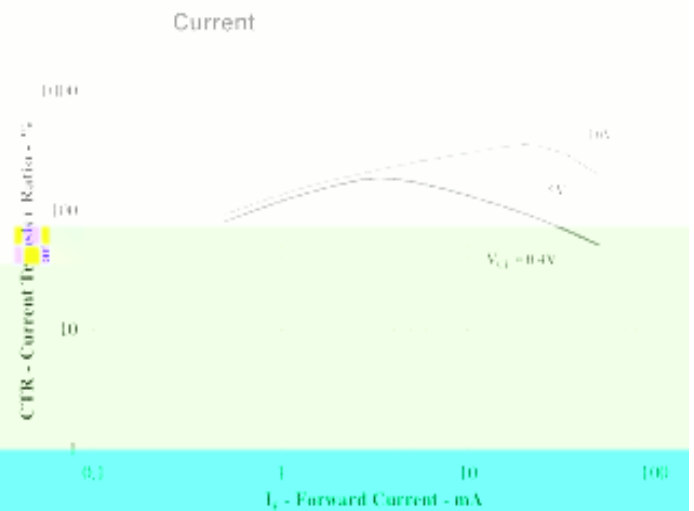


Figure 13. Normalized CTR vs. Ambient Temperature

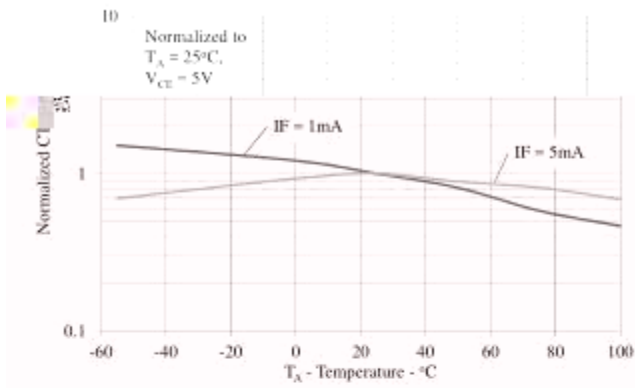


Figure 14. Collector-Emitter Saturation Voltage vs. Ambient Temperature

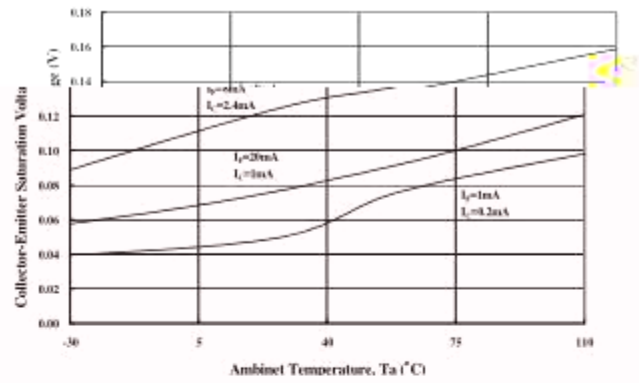


Figure 15. Collector-Emitter Saturation Voltage vs. Ambient Temperature

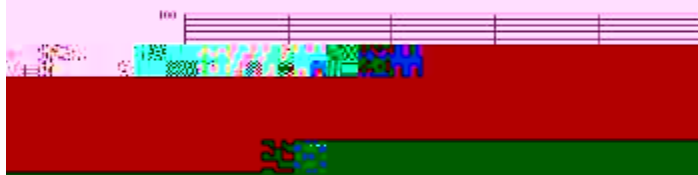


Figure 16. Switching Time vs. Load Resistance

