

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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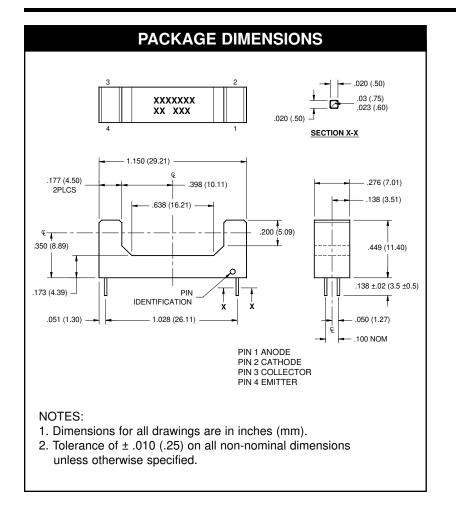


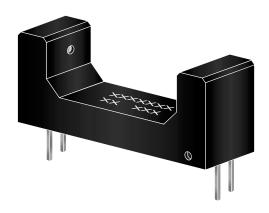


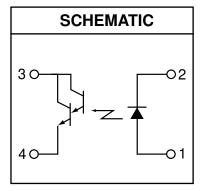




QVL25335







### **DESCRIPTION**

The QVL25335 consists of an infrared light emitting diode coupled to an NPN silicon photodarlington packaged into an injection molded housing.

### **FEATURES**

- 20 mm wide gap
- PC Board mount
- · .060" apertures
- · Sensor filter to attenuate visible light
- High CTR



# **SLOTTED OPTICAL SWITCH**

## **QVL25335**

ABSOLUTE MAXIMUM RATINGS (T <sub>A</sub> = 25°C unless otherwise specified)								
Parameter	Symbol	Rating	Unit					
Operating Temperature	T <sub>OPR</sub>	-40 to +85	°C					
Storage Temperature	T <sub>STG</sub>	-40 to +85	°C					
Soldering Temperature (Iron)(2,3 and 4)	T <sub>SOL-I</sub>	240 for 5 sec	°C					
Soldering Temperature (Flow)(2 and 3)	T <sub>SOL-F</sub>	260 for 10 sec	°C					
INPUT (EMITTER) Continuous Forward Current	lF	50	mA					
Reverse Voltage	V <sub>R</sub>	6	V					
Power Dissipation (1)	P <sub>D</sub>	100	mW					
OUTPUT (SENSOR) Collector to Emitter Voltage	V <sub>CEO</sub>	30	V					
Emitter to Collector Voltage	V <sub>ECO</sub>	6	V					
Collector Current	I <sub>C</sub>	40	mA					
Power Dissipation (1)	P <sub>D</sub>	150	mW					

### NOTES:

- 1. Derate power dissipation linearly 1.67 mW/°C above 25°C.
- 2. RMA flux is recommended.
- 3. Methanol or isopropanol alcohols are recommended as cleaning agents.
- 4. Soldering iron tip 1/16" (1.6 mm) minimum from housing.

ELECTRICAL / OPTICAL CHARACTERISTICS (T <sub>A</sub> =25°C)								
PARAMETER	TEST CONDITIONS	SYMBOL	MIN	TYP	MAX	UNITS		
INPUT (EMITTER)	J 00 A	\/-			4.7	V		
Forward Voltage	I <sub>F</sub> = 20 mA	VF	_	_	1.7	V		
Reverse Leakage Current	V <sub>R</sub> = 5 V	I <sub>R</sub>	_		100	μΑ		
OUTPUT (SENSOR)		D) (	0			.,		
Emitter to Collector Breakdown	l <sub>E</sub> = 100 μA	BV <sub>ECO</sub>	6	_	_	V		
Collector to Emitter Breakdown	$I_C = 1 \text{ mA}$	BV <sub>CEO</sub>	30	_	_	٧		
Collector to Emitter Leakage	V <sub>CE</sub> = 10 V	I <sub>CEO</sub>	_		100	nA		
COUPLED			<b>5</b> 0					
On-State Collector Current	$I_F = 10 \text{ mA}, V_{CE} = 5 \text{ V}$	IC(ON)	5.0	_	_	mA		
Saturation Voltage	$I_F = 10 \text{ mA}, I_C = 2 \text{ mA}$	VCE(SAT)	1	1	1.0	V		



### SLOTTED OPTICAL SWITCH

QVL25335

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