

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ Unless Otherwise Specified)	
Storage Temperature	-40°C to + 85°C
Operating Temperature	-40°C to + 85°C
Soldering:	
Lead Temperature (Iron)	240°C for 5 sec. ^(2,3,4)
Lead Temperature (Flow)	260°C for 10 sec. ^(2,3)
INPUT DIODE	
Continuous Forward Current	50 mA
Reverse Voltage	5.0 Volts
Power Dissipation	100 mW ⁽¹⁾
OUTPUT TRANSISTOR	
Collector-Emitter Voltage	30 Volts
Emitter-Collector Voltage	5.0 Volts
Collector Current	40 mA
Power Dissipation	100 mW ⁽¹⁾

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless Otherwise Specified)						
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
INPUT DIODE						
Forward voltage	V_F	—		1.70	V	$I_F = 20\text{ mA}$
Reverse Leakage Current	I_R	—		100	μA	$V_R = 2.0\text{ V}$
OUTPUT TRANSISTOR						
Emitter-Collector Breakdown	BV_{ECO}	5		—	V	$I_E = 100\ \mu\text{A}$, $E_e = 0$
Collector-Emitter Breakdown	BV_{CEO}	30		—	V	$I_C = 1.0\text{ mA}$, $E_e = 0$
Collector-Emitter Leakage	I_{CEO}	—		100	nA	$V_{CE} = 10.0\text{ V}$, $E_e = 0$
COUPLED						
On-State Collector Current	$I_{C(ON)}$		See selection guide page 3.		mA	$I_F = 20\text{ mA}$, $V_{CE} = 5\text{ V}$
Saturation Voltage	$V_{CE(SAT)}$	—		0.40	V	$I_F = 20\text{ mA}$, $I_C = 0.1\text{ mA}$

NOTES
<ol style="list-style-type: none"> Derate power dissipation linearly 1.67 mW/°C above 25°C. RMA flux is recommended. Methanol or Isopropanol alcohols are recommended as cleaning agents. Soldering iron tip 1/16" (1.6 mm) from housing.

QVBXXX OPTICAL SWITCH SELECTION GUIDE						
PART NUMBER	LEAD SPACING	APERTURES		I_{C(ON)}		
		LED	SENSOR	MIN	MAX	
QVB11123	.220"	0.050"	0.010"	0.20	—	
QVB11124	.220"	0.050"	0.010"	0.50	—	
QVB11223	.300"	0.050"	0.010"	0.20	—	
QVB11224	.300"	0.050"	0.010"	0.50	—	
QVB11323	.320"	0.050"	0.010"	0.20	—	
QVB11324	.320"	0.050"	0.010"	0.50	—	
QVB11133	.220"	0.050"	0.050"	0.50	—	
QVB11134	.220"	0.050"	0.050"	1.00	—	
QVB11233	.300"	0.050"	0.050"	0.50	—	
QVB11234	.300"	0.050"	0.050"	1.00	—	
QVB11333	.320"	0.050"	0.050"	0.50	—	
QVB11334	.320"	0.050"	0.050"	1.00	—	
QVB21113	.220"	0.010"	0.010"	0.10	—	
QVB21114	.220"	0.010"	0.010"	0.20	—	
QVB21213	.300"	0.010"	0.010"	0.10	—	
QVB21214	.300"	0.010"	0.010"	0.20	—	
QVB21313	.320"	0.010"	0.010"	0.10	—	
QVB21314	.320"	0.010"	0.010"	0.20	—	



SLOTTED OPTICAL SWITCH

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