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E159

Description

SIDELOOKER OPTOLOGIC
CASE 100CM

INPUT/OUTPUT TABLE

Part Number	Light	Output
QSE159	On	LOW
	Off	HIGH

See detailed ordering and shipping information on page 5 of this data59 -et 1.2796 l316

Features

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Block Diagram

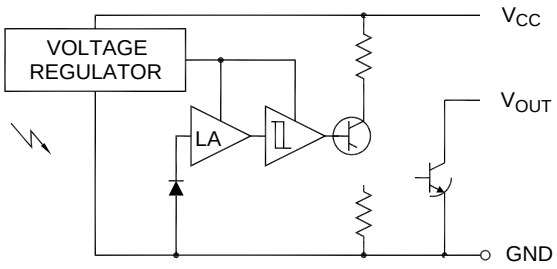

Figure 1. QSE159 Open−Collector Output Inverter

MAXIMUM RATINGS (T_A = 25°C unless otherwise specified)

Symbol	Parameter	Rating	Unit
T_{OPR}	Operating Temperature	−40 to +85	°C
T_{STG}	Storage Temperature	−40 to +100	°C
$T_{SOL−I}$	Soldering Temperature (Iron) (Notes 2, 3, 4)	240 for 5 s	°C
$T_{SOL−F}$	Soldering Temperature (Flow) (Notes 2, 3)	260 for 10 s	°C
I_O	Output Current	50	mA
V_{CC}	Supply Voltage	4.0 to 16	V
V_O	Output Voltage	35	V
P_D	Power Dissipation (Note 1)	100	mW

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

1. Derate power dissipation linearly 2.50 mW/°C above 25°C.
2. RMA flux is recommended.
3. Methanol or isopropyl alcohols are recommended as cleaning agents.
4. Soldering iron 1/16” (1.6 mm) minimum from housing.

ELECTRICAL CHARACTERISTICS (T

TYPICAL PERFORMANCE CURVES

(Sensor Coupled to QEE113 Emitter)

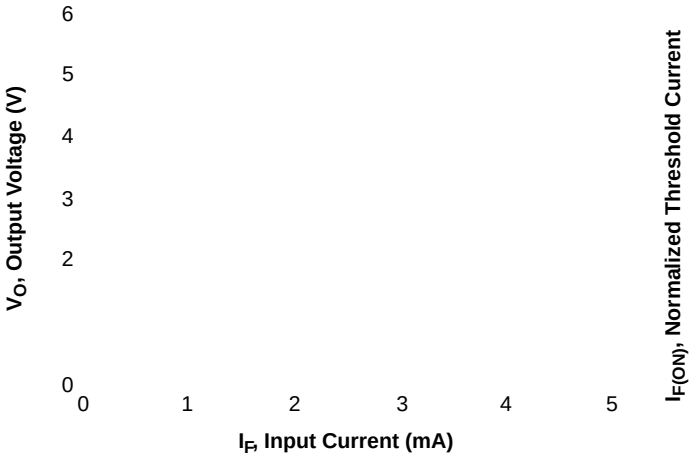

Figure 2. Output Voltage vs. Input Current

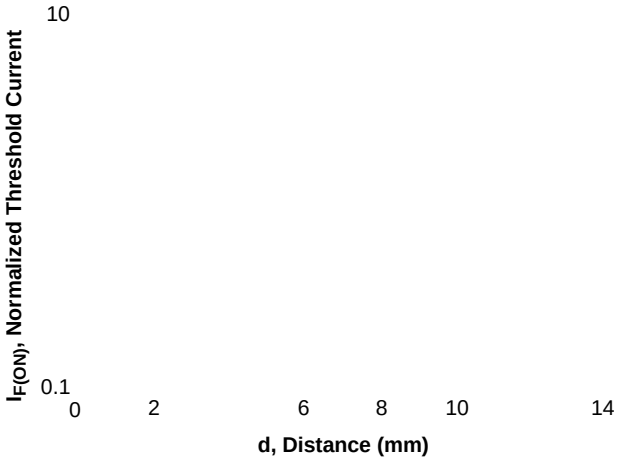

Figure 3. Threshold Current vs. Distance

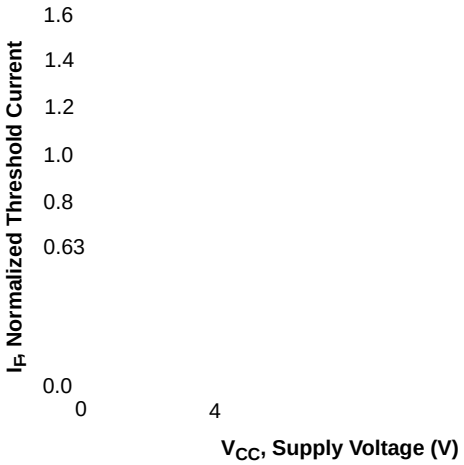

Figure 4. Normalized Threshold Current vs. Supply Voltage

TYPICAL PERFORMANCE CURVES (continued)

(Sensor Coupled to QEE113 Emitter)

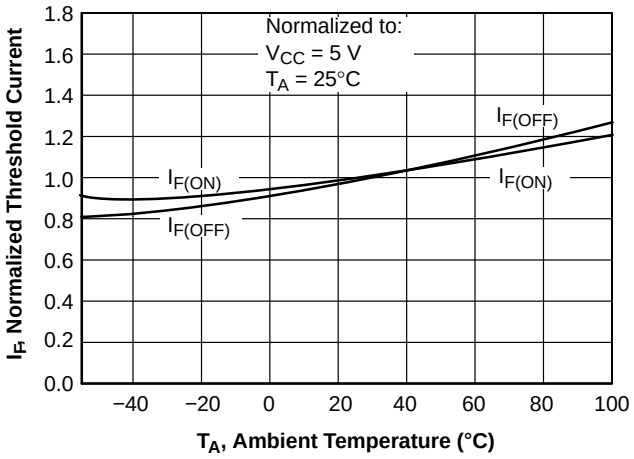

Figure 5. Normalized Threshold Current vs. Ambient Temperature

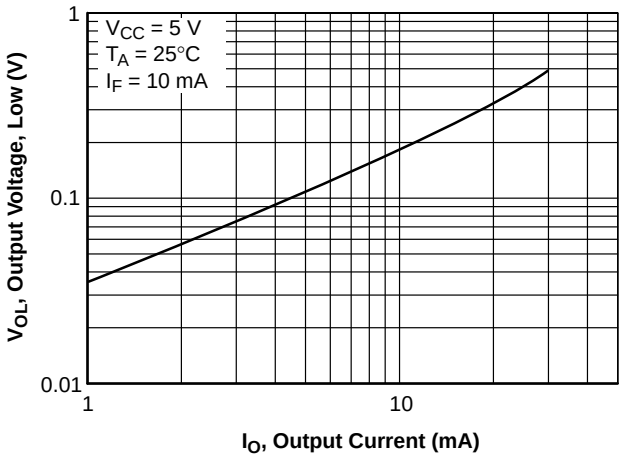

Figure 6. Low Output Voltage vs. Output Current

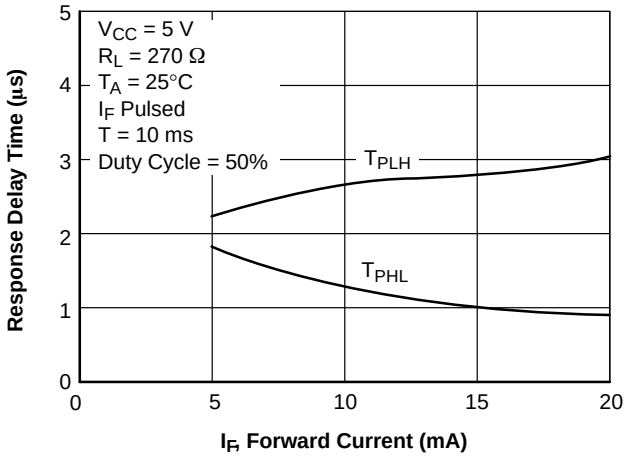

Figure 7. Response Time vs. Forward Current

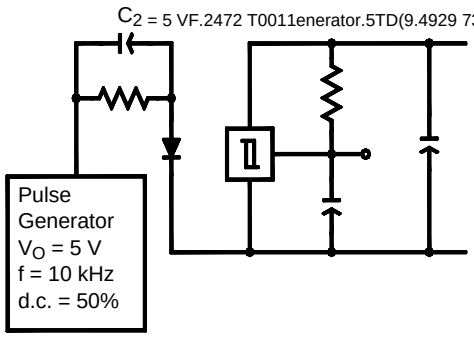

Figure 8. Switching Speed Test Circuit

Figure 9. Switching Times Definitions

SIDELOOKER OPTOLOGIC 4.44x5.08x2.54, 1.90P
CASE 100CM
ISSUE A

DATE 05 MAR 2024

NOTES:
1. D

END VIEW

		D	0.64	0.76	0.8∪
					D
		b	0.78		
L	12.70	13.46	---		
L1	1.27	1.			
				52	1.78
		L2	2.29	2.54	2.79