



SLOTTED OPTICAL SWITCH

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ Unless Otherwise Specified)	
Storage Temperature	-40°C to $+85^\circ\text{C}$
Operating Temperature	-40°C to $+85^\circ\text{C}$
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	30.0 Volts
Emitter-Collector Voltage	5.0 Volts
Power Dissipation	100 mW ⁽¹⁾

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless Otherwise Specified)						
PARAMETER	SYMBOL	MIN.	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						
OPB867T51	$I_{C(ON)}$	1.8	—	mA	$I_F = 20\text{ mA}$, $V_{CE} = 0.6\text{ V}$	
OPB867T55	$I_{C(ON)}$	1.8	—	mA	$I_F = 20\text{ mA}$, $V_{CE} = 0.6\text{ V}$	
Saturation Voltage	$V_{CE(SAT)}$	—	0.60	V	$I_F = 20\text{ mA}$, $I_C = 1.8\text{ mA}$	

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