

Types OP130, OP131, OP132, OP133

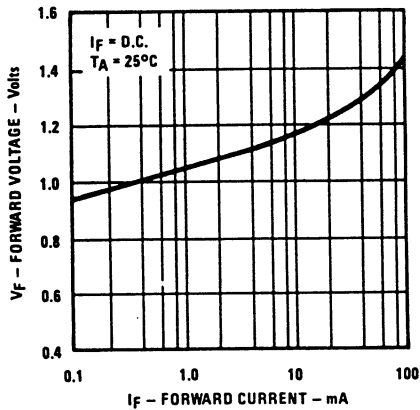
Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
P_O	Radiant Power Output OP130	1.0			mW	$I_F = 100 \text{ mA}^{(3)}$
	OP131	3.0			mW	$I_F = 100 \text{ mA}^{(3)}$
	OP132	4.0			mW	$I_F = 100 \text{ mA}^{(3)}$
	OP133	5.0			mW	$I_F = 100 \text{ mA}^{(3)}$
V_F	Forward Voltage			1.75	V	$I_F = 100 \text{ mA}^{(3)}$
I_R	Reverse Current			100	μA	$V_R = 2.0 \text{ V}$
λ_p	Wavelength at Peak Emission		935		nm	$I_F = 10 \text{ mA}^{(3)}$
B	Spectral Bandwidth Between Half Power Points		50		nm	$I_F = 10 \text{ mA}^{(3)}$
$\Delta\lambda_p/\Delta T$	Spectral Shift with Temperature		+0.30		nm/ $^\circ\text{C}$	$I_F = \text{Constant}$
θ_{HP}	Emission Angle at Half Power Points		18		Deg.	$I_F = 100 \text{ mA}$
t_r	Output Rise Time		1000		ns	$I_{F(PK)} = 100 \text{ mA}$, $PW = 10 \mu\text{s}$, D.C. = 10%
t_f	Output Fall Time		500		ns	$I_{F(PK)} = 100 \text{ mA}$, $PW = 10 \mu\text{s}$, D.C. = 10%

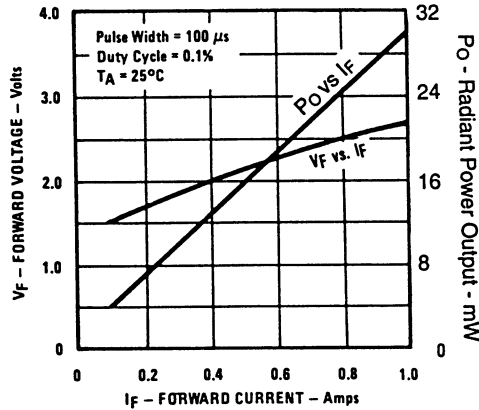
INFRARED
EMITTING
DIODES

Typical Performance Curves

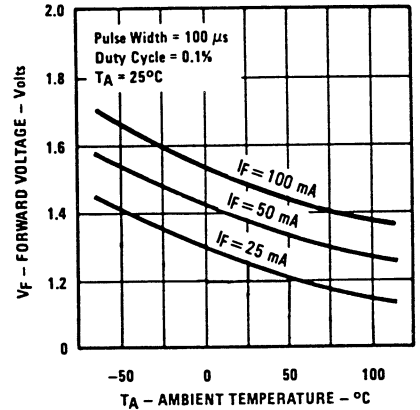
Forward Voltage vs. Forward Current



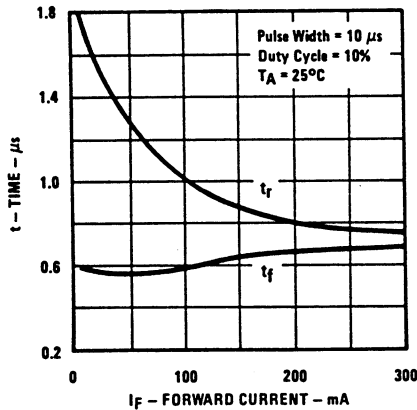
Forward Voltage and Radiant Incidence vs. Forward Current



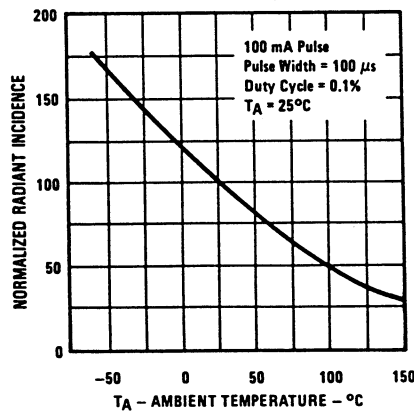
Forward Voltage vs. Ambient Temperature



Rise and Fall Time vs. Forward Current



Normalized Radiant Incidence vs. Ambient Temperature



Relative Radiant Intensity vs. Angular Displacement

