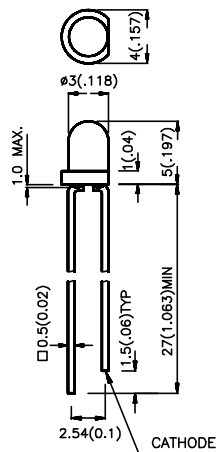


Infrared Emitting Diodes



3mm Infrared Emitting Diodes

TNI30F	Water Clear Lens
TNI30BF	Blue Transparent Lens
THI30F	Water Clear Lens
THI30BF	Blue Transparent Lens

Electro-Optical Characteristic (Ta=25°C)

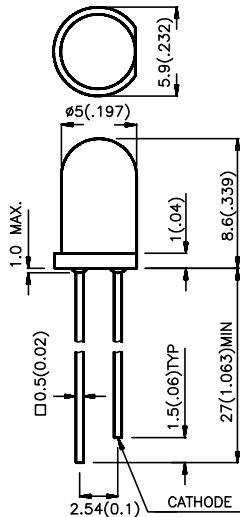
Item	P/N	Min.	Typ.	Max.	Unit	Condition	
Radiant Intensity	TNI30F	2	*5	-	20	*40	mW/sr IF=20mA *IF=50mA
	TNI30BF	2	*8	-	8	*40	
Viewing Angle		-	30	-	Deg		
Forward Voltage		-	1.2	1.5	V	IF=20mA	
Reverse Current		-	-	10	uA	VR=5V	
Peak Wavelength		-	940	-	nm	IF=20mA	
Spectral Bandwidth		-	50	-	nm	IF=20mA	
Junction Capacitance		-	90	-	PF	V=0 f=1MHZ	

Absolute maximum Rating (Ta=25°)

Item	Symbol	Max. Rating
Power Dissipation	Pd	100mW
Forward Current	IF	50mA
Peak Forward Current	IP	1.2A
Reverse Voltage	VR	5V
Operating Temperature	Topr	-40~+85°C
Storage Temperature	Tstg	-40~+85°C

(Ip=Pulse width ≤10us, Duty ≤1/100)

Item	P/N	Min.	Typ.	Max.	Unit	Condition	
Radiant Intensity	THI30F	2	*5	-	20	*40	mW/sr IF=20mA *IF=50mA
	THI30BF	2	*8	-	8	*40	
Viewing Angle		-	30	-	Deg		
Forward Voltage		-	1.3	1.7	V	IF=20mA	
Reverse Current		-	-	10	uA	VR=5V	
Peak Wavelength		-	880	-	nm	IF=20mA	
Spectral Bandwidth		-	50	-	nm	IF=20mA	
Junction Capacitance		-	90	-	PF	V=0 f=1MHZ	



5mm Infrared Emitting Diodes

TNI53F	Water Clear Lens
TNI53BF	Blue Transparent Lens
THI53F	Water Clear Lens
THI53BF	Blue Transparent Lens

Electro-Optical Characteristic (Ta=25°C)

Item	P/N	Min.	Typ.	Max.	Unit	Condition	
Radiant Intensity	TNI53F	8	*12.5	-	40	*40	mW/sr IF=20mA *IF=50mA
	TNI53BF	5	*8	-	40	*50	
Viewing Angle		-	30	-	Deg		
Forward Voltage		-	1.2	1.5	V	IF=20mA	
Reverse Current		-	-	10	uA	VR=5V	
Peak Wavelength		-	940	-	nm	IF=20mA	
Spectral Bandwidth		-	50	-	nm	IF=20mA	
Junction Capacitance		-	90	-	PF	V=0 f=1MHZ	

Absolute maximum Rating (Ta=25°)

Item	Symbol	Max. Rating
Power Dissipation	Pd	100mW
Forward Current	IF	50mA
Peak Forward Current	IP	1.2A
Reverse Voltage	VR	5V
Operating Temperature	Topr	-40~+85°C
Storage Temperature	Tstg	-40~+85°C

(Ip=Pulse width ≤10us, Duty ≤1/100)

Item	P/N	Min.	Typ.	Max.	Unit	Condition	
Radiant Intensity	THI53F	8	*12.5	-	40	*40	mW/sr IF=20mA *IF=50mA
	THI53BF	5	*8	-	40	*50	
Viewing Angle		-	30	-	Deg		
Forward Voltage		-	1.3	1.7	V	IF=20mA	
Reverse Current		-	-	10	uA	VR=5V	
Peak Wavelength		-	880	-	nm	IF=20mA	
Spectral Bandwidth		-	50	-	nm	IF=20mA	
Junction Capacitance		-	90	-	PF	V=0 f=1MHZ	