

	INTX 17-0900			INTX 22-1000			INTX 08-0300 Preliminary		
Description	Basic Product			Larger Area and Power			Small Area with Lower Power 2.5 Volt Drive		
Thermal Time Constant	14.4 mS typ.			20.0 mS typ.			10.0 mS typ.		
Operating Temperature	605° C Typical / 750° C Max.								
Heated Membrane Area	2.89 mm ² 1.7x1.7 mm			4.80 mm ² 2.2 X 2.2 mm			0.64mm ² 0.8 X 0.8 mm		
Drive Power, mW	690 Typical / 900 Max.			767 Typical / 1,000 Max.			230 Typical / 300 Max.		
Emissivity	.80						.90		
Spectral Range	1 – 20 microns typical								
Modulation Frequency	1-100 Hz. Typical						1-200 Hz. Typical		
Frequency at 50% Modulation	100 Hz.			70 Hz.			140 Hz.		
Resistance at Operating Temperature (750 C) ohms	Min.	Typical	Max.	Min.	Typical	Max.	Min.	Typical	Max.
	40	50	60	35	45	55	16	21	26
Resistance at Room Temperature (25 C) ohms	48 Typical			43 Typical			14 Typical		
Drive Voltage at Operating Temperature (750 C) volts	5.9 Typical / 6.7 Max.			5.9 Typical / 6.7 Max.			2.2 Typical / 2.5 Max.		
Drive Current at Operating Temperature (750 C) mA	117 Typical / 134 Max.			130 Typical / 149 Max.			105 Typical / 120 Max.		
Average Lifetime, at 10 Hz, 50% duty cycle	100,000 hrs at 605° C 5,000 hrs at 750° C						TBD		
Package	Type Code - P			ANSI #			Type Code	ANSI #	
	1			TO-5			- P		
	2			TO-39			3	TO-18	

A Range of Emitters

The INTX 17-0900 was our first emitter, introduced in 2005. With an emission area of 1.7 mm X 1.7mm and a 900 mW maximum drive power it is still very popular.

In response to requests for more power, for instance to illuminate larger detector arrays, the INTX 22-1000 was developed. It's emission area is 2.2 mm X 2.2 mm and it has a maximum drive power of 1000 mW.

In 2011, a 5.0 Volt version of the INTX 22-1000 is planned to accommodate single supply systems.

In response to requests for low-cost, low-power devices, we are also developing the model INTX 08 -0300. With a smaller 0.8 mm X 0.8 mm emission area, it has a maximum power consumption of only 300 mW. Drive voltage will be typically 2.2-2.5 volts. This device is targeted at high-volume potentially battery-powered, sensor devices.

Various optical windows as well as reflector options are available.