

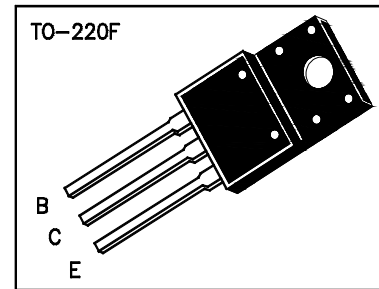
## BU3150AF NPN Power Transistor

### \*Applications:

- ◆ Electrical Ballasts for fluorescent lighting
- ◆ Charger and Switch mode power supplies

### \*Features:

- ◆ High Current capacity
- ◆ High switching speed
- ◆ Wide safe operation area



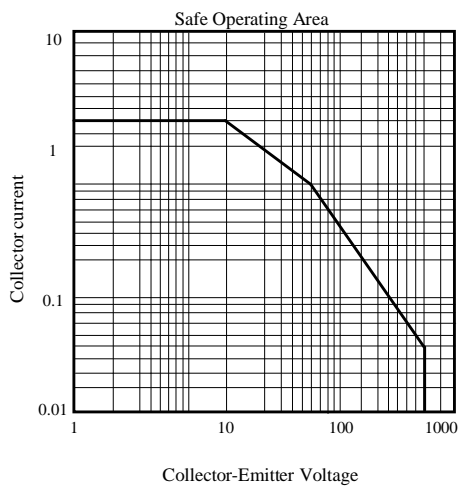
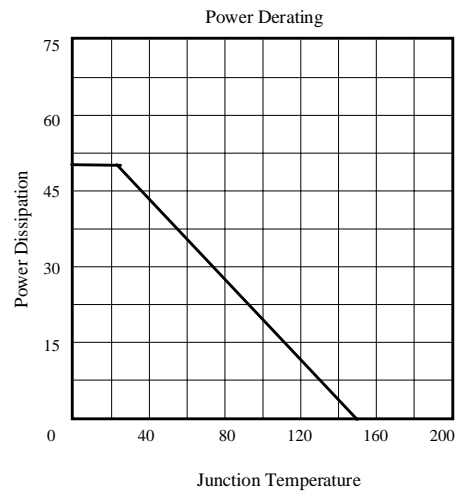
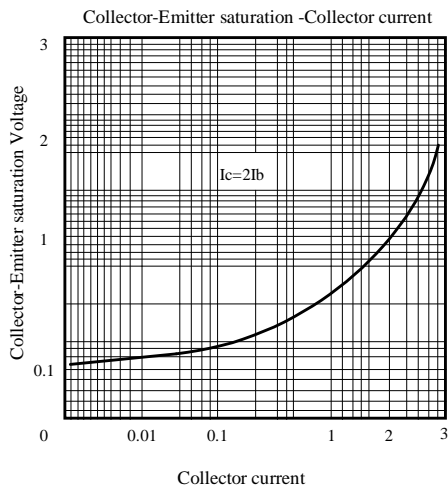
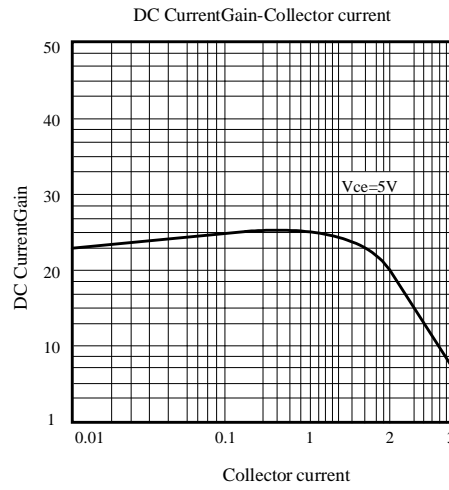
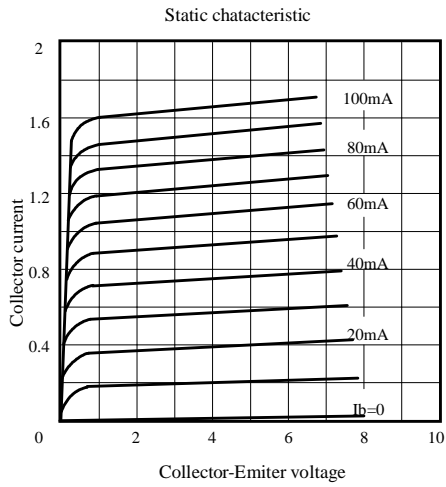
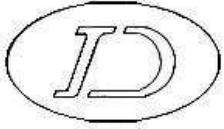
B.Base C.Collector E.Emitter

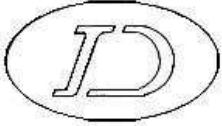
### Absolute Maximum Ratings: (Tc=25°C unless specified)

Parameter	Symbol	Value	Unit
Collector-Emitter Voltage	$BV_{CEO}$	$\geq 800$	V
Collector-Base Voltage	$BV_{CBO}$	$\geq 1100$	V
Emitter-Base Voltage	$BV_{EBO}$	$\geq 9$	V
Collector Current	$I_{cm}$	3	A
Total Power Dissipation	$P_{cm}$	50	W
Junction Temperature	$T_{jm}$	150	°C
Storage Temperature	$T_{stg}$	- 55 ~ 150	°C

### Electronical Characteristic: (Tc=25°C unless specified)

Parameter	Symbol	Test conditions	Min.	Max.	Unit
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=1mA; I_B=0$	800		V
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C=1mA; I_E=0$	1100		V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E=1mA; I_C=0$	9		V
Collector-Emitter cut-off current	$I_{CEO}$	$V_{CE}=750V; I_B=0$		20	uA
Collector-Base cut-off current	$I_{CBO}$	$V_{CB}=1050V; I_E=0$		10	uA
Emitter-Base cut-off current	$I_{EBO}$	$V_{EB}=7V; I_C=0$		10	uA
DC Current Gain	$H_{FE}$	$V_{CE}=5V; I_C=0.2A$	15	35	
		$V_{CE}=5V; I_C=1mA$	8		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1A; I_B=0.5A$		0.6	V
Fall time	$t_f$	$I_C=1A; I_B=I_{B2}=0.2A; V_{CE}=300V$		0.5	uS
Typical Frequency	$f_T$	$V_{CE}=10V; I_C=0.1A; f=1MHz$	4		MHz





## Package Dimensions

**TO-220F** (Unit: mm,Tolerance $\pm 0.1$ mm unless specified)

