

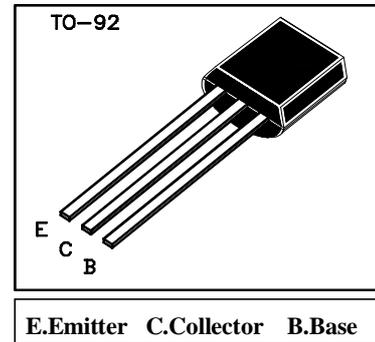
## B647 PNP Power Transistor

### \*Applications :

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

### \*Features:

- ◆ High switching speed
- ◆ Wide safe operation area

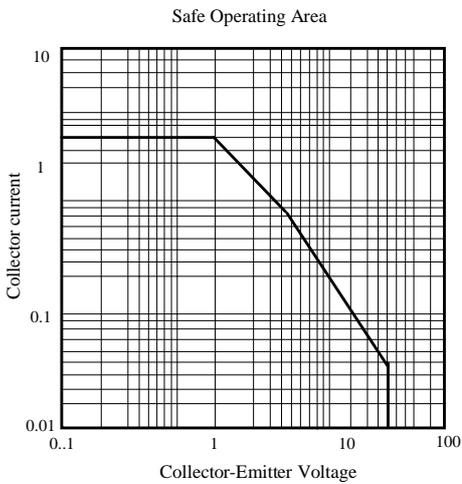
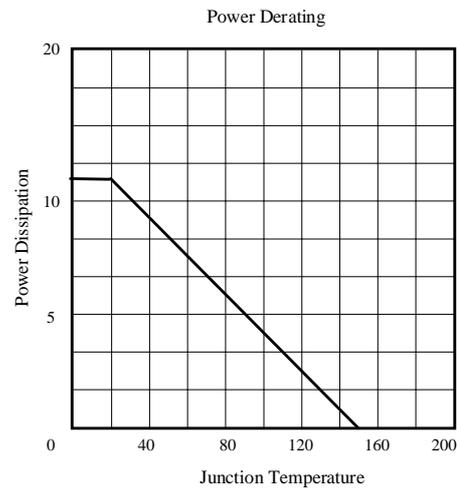
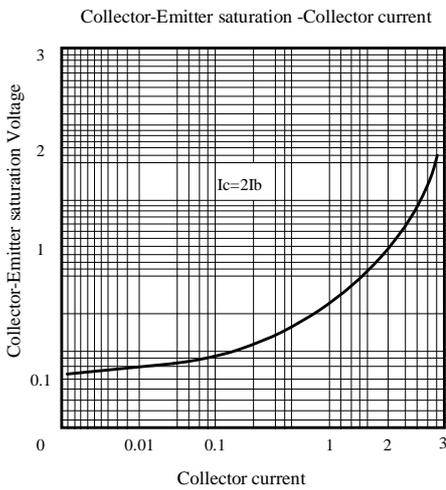
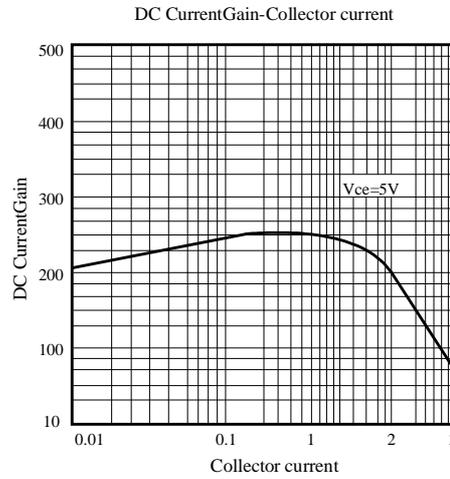
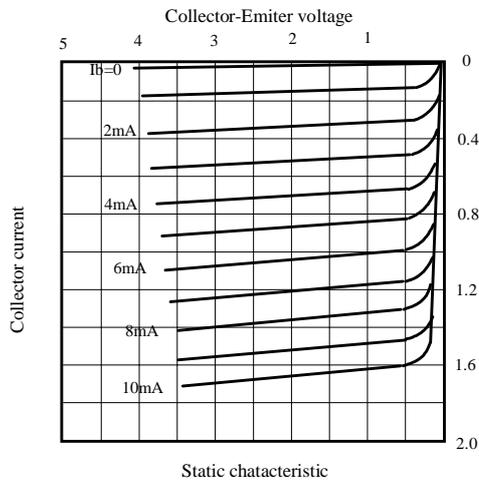
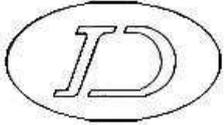


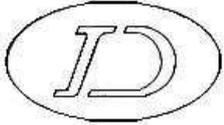
### Absolute Maximum Ratings: (Tc=25°C unless specified)

Parameter	Symbol	Value	Unit
Collector-Emitter Voltage	$BV_{CEO}$	$\geq -40$	V
Collector-Base Voltage	$BV_{CBO}$	$\geq -60$	V
Emitter-Base Voltage	$BV_{EBO}$	$\geq -5$	V
Collector Current	$I_{cm}$	-2.0	A
Total Power Dissipation	$P_{cm}$	12	W
Junction Temperature	$T_{jm}$	150	°C
Storage Temperature	$T_{stg}$	-55 ~ 150	°C

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

Parameter	Symbol	Test conditions	Min.	Max.	Unit
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C = -1mA; I_B = 0$	-40		V
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C = -1mA; I_E = 0$	-60		V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E = -1mA; I_C = 0$	-5		V
Collector-Emitter cut-off current	$I_{CEO}$	$V_{CE} = -38V; I_B = 0$		-20	uA
Collector-Base cut-off current	$I_{CBO}$	$V_{CB} = -58V; I_E = 0$		-10	uA
Emitter-Base cut-off current	$I_{EBO}$	$V_{EB} = -5V; I_C = 0$		-10	uA
DC Current Gain	$H_{FE}$	$V_{CE} = -3V; I_C = -300mA$	120	400	
		$V_{CE} = 5V; I_C = 1mA$	8		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -1A; I_B = -100mA$		-0.5	V
Storage time	$t_f$	$I_C = -1A; I_{B1} = I_{B2} = -0.2A; V_{CE} = -20V$		0.5	uS
Typical Frequency	$f_T$	$V_{CE} = -5V; I_C = -50mA; f = 30MHz$		50	MHz





## Package Dimensions

**TO-92** (Unit: mm, Tolerance  $\pm 0.1$ mm unless specified)

