



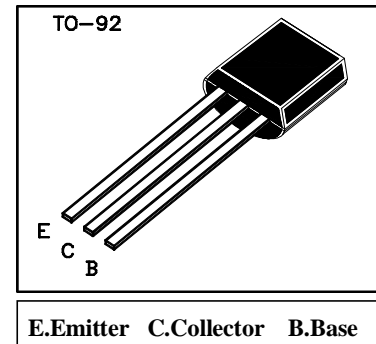
B647 PNP Power Transistor

*Applications :

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

*Features:

- ◆ High switching speed
- ◆ Wide safe operation area

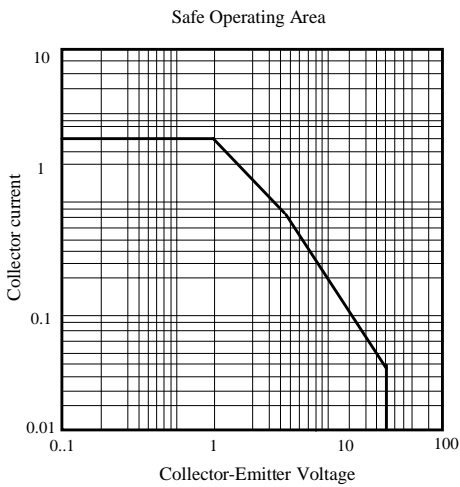
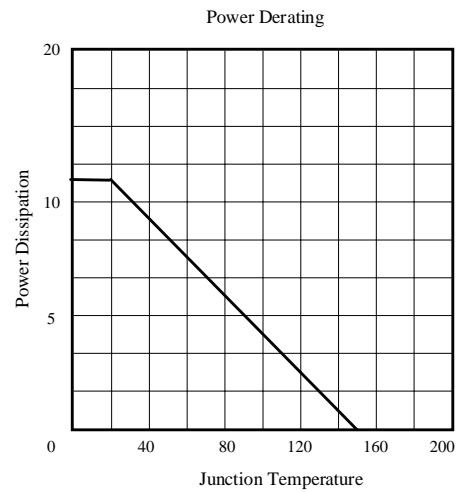
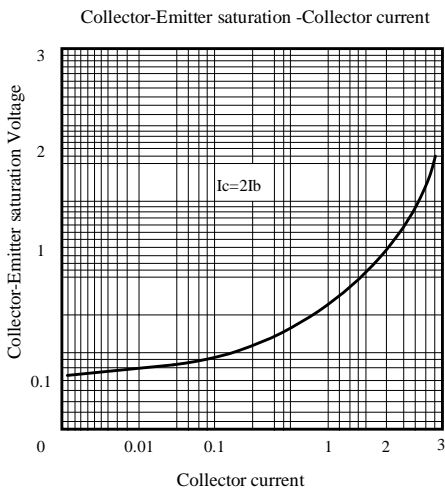
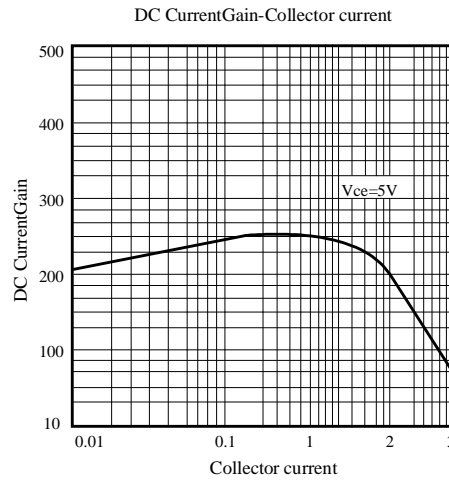
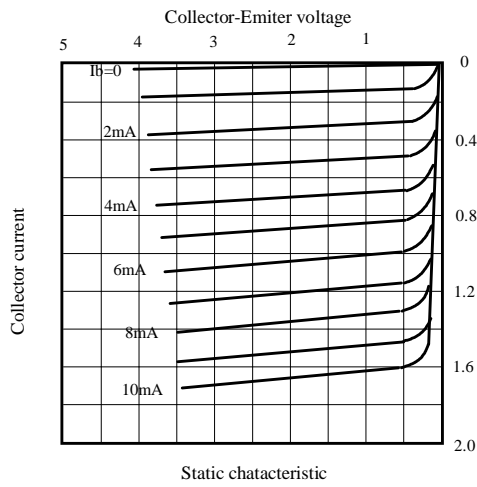
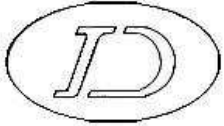


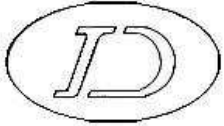
Absolute Maximum Ratings: (Tc=25°C unless specified)

Parameter	Symbol	Value	Unit
Collector-Emitter Voltage	BV_{CEO}	≥ -40	V
Collector-Base Voltage	BV_{CBO}	≥ -60	V
Emitter-Base Voltage	BV_{EBO}	≥ -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 ± 0.1 mm unless specified)

