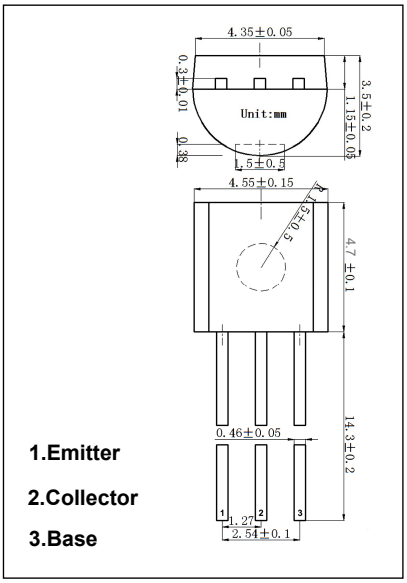
YZPST

YZPST Group

TO-92 Plastic-Encapsulate Transistors

P/N: YZPST-2SB888

PNP Epitaxial Planar Silicon Darlington Transistor



Applications

· Motor drivers, printer hammer drivers, relay drivers, votlage regulator control.

Features

· High DC current gain (5000 or greater).
· Large current capacity and wide ASO.
· Low saturation voltage : $V_{CE(sat)}$=–0.8V typ.

Absolute Maximum Ratings at Ta = 25˚C

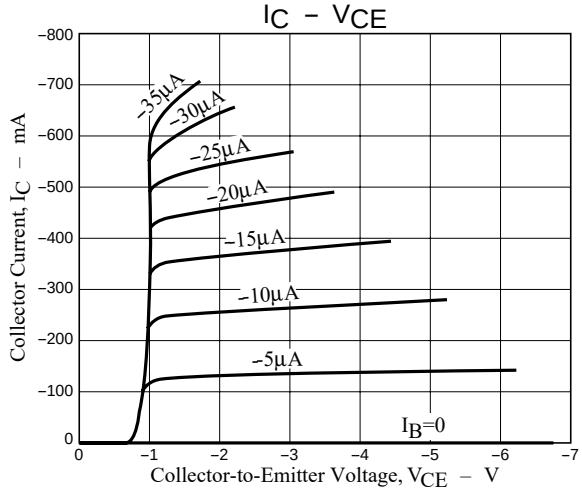
Symbol	Parameter	Conditions	Ratings	Unit
V_{CBO}	Collector-to-Base Voltage		–80	V
V_{CEO}	Collector-to-Emitter Voltage		–50	V
V_{EBO}	Emitter-to-Base Voltage		–10	V
I_C	Collector Current		–0.7	A
I_{CP}	Collector Current (Pulse)		–2	A
P_C	Allowable Collector Dissipation		600	mW
Tj	Junction Temperature		150	˚C
Tstg	Storage Temperature		–55 to +150	˚C

Electrical Characteristics at Ta = 25˚C

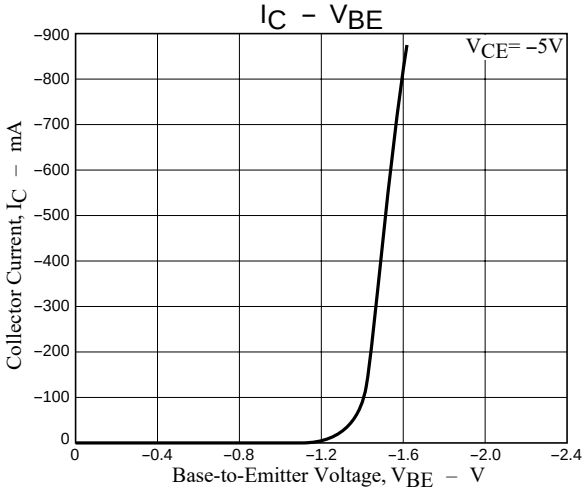
Symbol	Parameter	Conditions	Ratings			Unit
			min	typ	max	
I_{CBO}	Collector Cutoff Current	V_{CB}=–40V, I_E=0			–0.1	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}=–8V, I_C=0			–0.1	μA
$h_{FE}1$	DC Current Gain	V_{CE}=–2V, I_C=–50mA	5000			
$h_{FE}2$		V_{CE}=–2V, I_C=–500mA	3000			
f_T	Gain-Bandwidth Product	V_{CE}=–5V, I_C=–50mA		170		MHz
C_{ob}	Output Capacitance	V_{CB}=–10V, f=1MHz		16		pF
$V_{CE(sat)}$	Collector-to-Emitter Saturation Voltage	I_C=–100mA, I_B=–0.1mA		–0.8	–1.2	V
$V_{BE(sat)}$	Base-to-Emitter Saturation Voltage	I_C=–100mA, I_B=–0.1mA		–1.3	–2.0	V
$V_{(BR)CBO}$	Collector-to-Base Breakdown Voltage	I_C=–10μA, I_E=0	–80			V
$V_{(BR)CEO}$	Collector-to-Emitter Breakdown Voltage	I_C=–1mA, R_{BE}=∞	–50			V
$V_{(BR)EBO}$	Emitter-to-Base Breakdown Voltage	I_E=–10μA, I_C=0	–10			V

Typical Characteristics

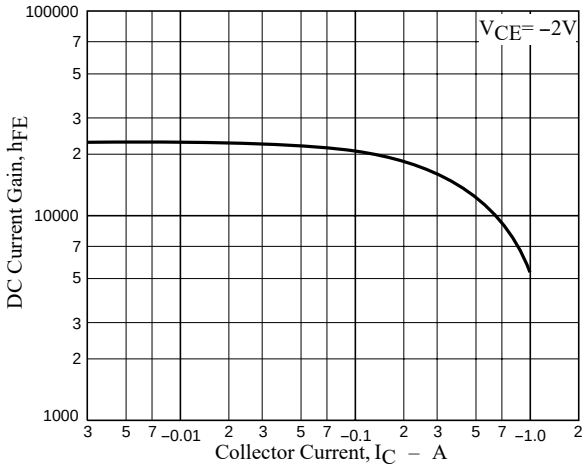
I_C – V_{CE}



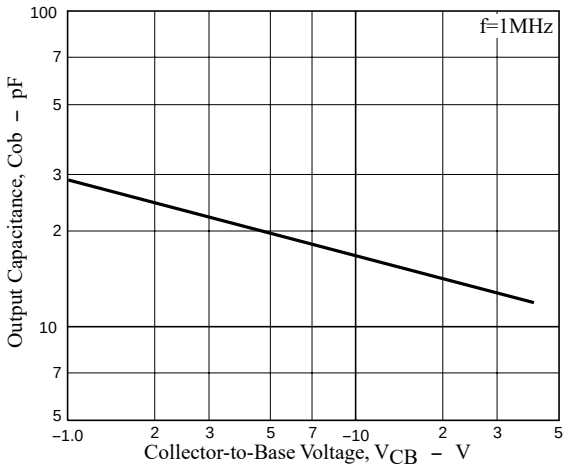
I_C – V_{BE}



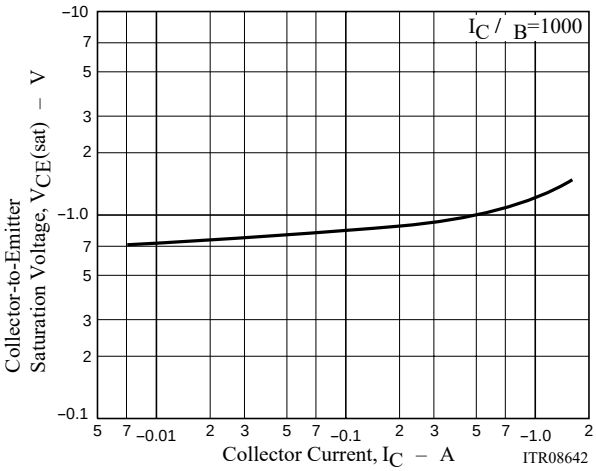
h_{FE} – I_C



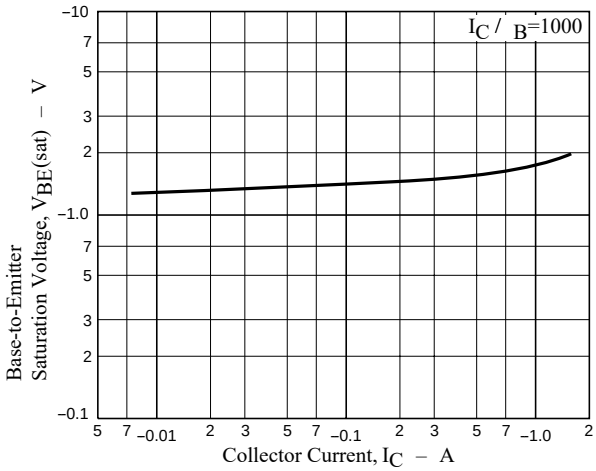
Cob -- V_{CB}



V_{CE}(sat) – I_C



V_{BE}(sat) – I_C



Typical Characteristics