

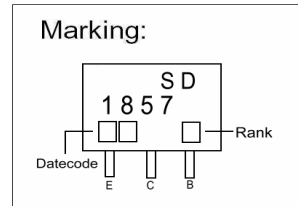
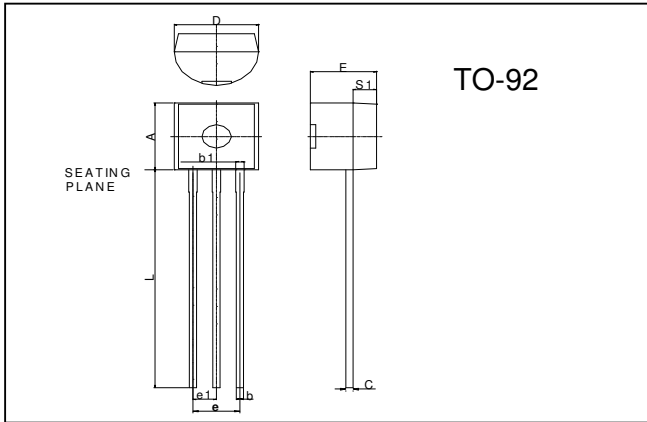
GSD1857 NPN EPITAXIAL PLANAR TRANSISTOR

POWER TRANSISTOR

FEATURES

- *High breakdown voltage. ($BV_{CEO}=120V$).
- *Low collector output capacitance. (Type.20pF at $V_{CB}=10V$)
- *High transition frequency. ($f_T=80MHz$)

Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S ₁	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b ₁	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

Absolute Maximum Ratings (Ta = 25°C)

Parameter		Ratings	Unit
Collector to Base Voltage	V_{CBO}	120	V
Collector to Emitter Voltage	V_{CEO}	120	V
Emitter to Base Voltage	V_{EBO}	5	V
Collect Current(DC)	I_C	2	A
Collect Current*(Pulse)	I_{CP}	3	A
Junction Temperature	T_j	+150	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C
Total Power Dissipation	P_D	1	W

Electrical Characteristics (Ta = 25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CBO}	120	-	-	V	$I_C=50\mu A$
BV_{CEO}	120	-	-	V	$I_C=1mA$
BV_{EBO}	5	-	-	V	$I_E=50\mu A$
I_{CBO}	-	-	1	μA	$V_{CB}=100V$
I_{EBO}	-	-	1	μA	$V_{BE}=4V$
* $V_{CE(sat)}$	-	-	400	mV	$I_C=1A, I_B=100mA$
hFE	82	-	390		$V_{CE}=5V, I_C=0.1A$
fT	-	80	-	MHz	$V_{CE}=5V, I_E=100mA, f=30MHz$
Cob	-	20	-	pF	$V_{CB}=10V, I_E=0A, f=1MHz$

Classification Of hFE1

*Measured using pulse current.

Rank	P	Q	R
Range	82-180	120-270	180-390

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