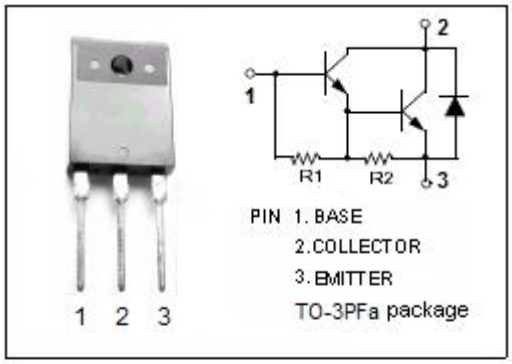
isc Silicon NPN Darlington Power Transistor 2SD1457

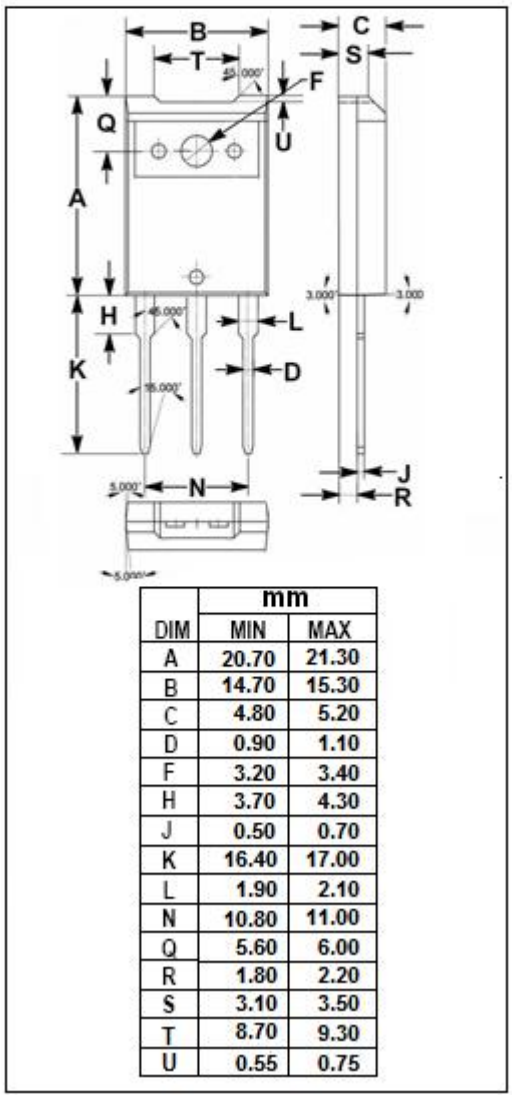


DESCRIPTION

- High DC Current Gain
  : h_{FE}= 700(Min.)@ I_C= 2A, V_{CE}= 2V
- High Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = 150V(Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for power amplification.



DIM	mm MIN	MAX
A	20.70	21.30
B	14.70	15.30
C	4.80	5.20
D	0.90	1.10
F	3.20	3.40
H	3.70	4.30
J	0.50	0.70
K	16.40	17.00
L	1.90	2.10
N	10.80	11.00
Q	5.60	6.00
R	1.80	2.20
S	3.10	3.50
T	8.70	9.30
U	0.55	0.75

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	6	A
I_{CM}	Collector Current-Peak	10	A
P_C	Collector Power Dissipation @T_a=25℃	3	W
	Collector Power Dissipation @T_C=25℃	60	
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 50mA, L= 10mH	150			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 5mA ,I_C= 0	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 3A , I_B= 60mA			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 3A , I_B= 60mA			2.5	V
I_{CBO}	Collector Cutoff current	V_{CB}= 200V, I_E= 0			0.1	mA
h_{FE}	DC Current Gain	I_C= 2A ; V_{CE}= 2V	700		10000	
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A ; V_{CE}= 10V		15		MHz

◆ **h_{FE} Classifications**

Q	P	O
700-2500	2000-5000	4000-10000