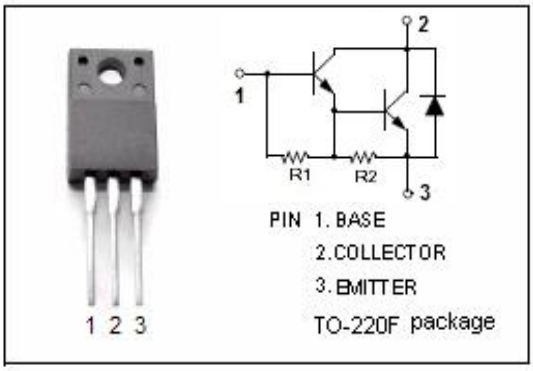
isc Silicon NPN Darlington Power Transistor 2SD2162

DESCRIPTION

- High hFE due to Darlington connection
  : H_{FE} ≥ 2,000 @(V_{CE} = 2.0 V, I_C = 3.0 A)
- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$ ≤1.5V @ (I_C=3A, I_B= 3mA)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

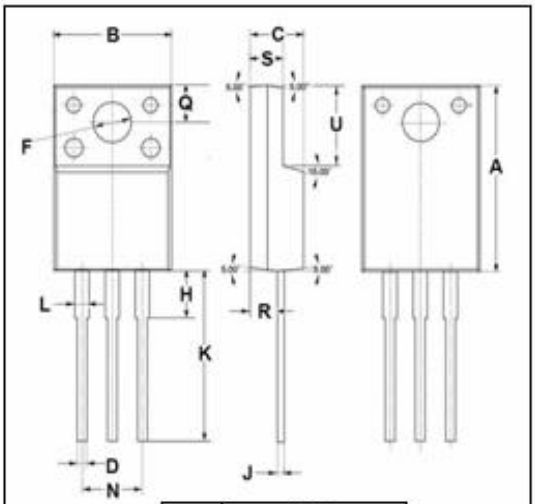


APPLICATIONS

- Designed for low-frequency power amplifiers and low-speed switching applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	150	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	8	A
I_B	Base Current-Continuous	0.8	A
P_C	Collector Power Dissipation @T_a=25℃	2	W
	Collector Power Dissipation @T_C=25℃	25	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃



DIM	mm MIN	MAX
A	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.90
F	3.10	3.30
H	3.70	3.90
J	0.50	0.70
K	13.4	13.6
L	1.10	1.30
N	5.00	5.20
Q	2.70	2.90
R	2.20	2.40
S	2.65	2.90
U	6.40	6.60

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ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 3A; I_B= 3mA			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 3A; I_B= 3mA			2.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 100V; I_E= 0			1.0	μA
h_{FE-1}	DC Current Gain	I_C= 3A; V_{CE}= 2V	2000		15000	
h_{FE-2}	DC Current Gain	I_C= 5A; V_{CE}= 2V	500			

◆ **h_{FE-1} Classifications**

M	L	K
2000-5000	3000-7000	5000-15000