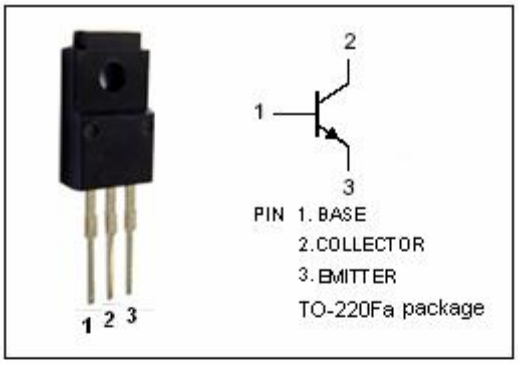
isc Silicon NPN Power Transistor — 2SD2156



DESCRIPTION

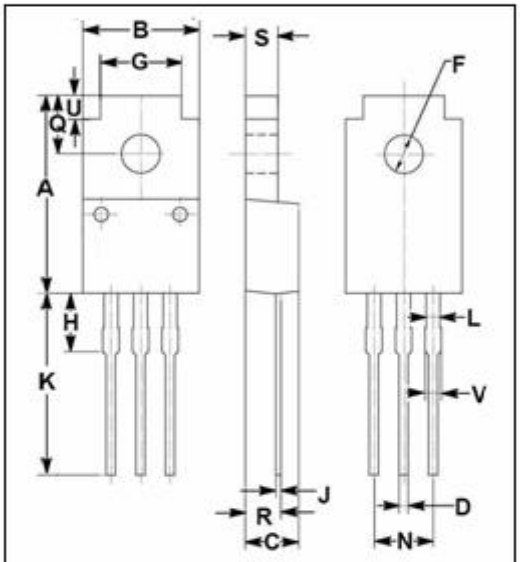
- High DC Current gain
- Low Collector Saturation Voltage
  : $V_{CE(sat)}$= 1.0V(Max)@ I_C= 2A
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 60V (Min)
- Good Linearity of h_{FE}
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for power amplification

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	3	A
I_{CM}	Collector Current-Peak	6	A
I_B	Base Current-Continuous	1	A
P_C	Collector Power Dissipation @ T_C=25℃	25	W
	Collector Power Dissipation @ Ta=25℃	2	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	mm MAX
A	16.85	17.15
B	9.54	10.10
C	4.35	4.65
D	0.75	0.90
F	3.20	3.40
G	6.90	7.20
H	5.15	5.45
J	0.45	0.75
K	13.35	13.65
L	1.10	1.30
N	4.98	5.18
Q	4.85	5.15
R	2.55	3.25
S	2.70	2.90
U	1.75	2.05
V	1.30	1.50

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CEO}	Collector-Emitter breakdown voltage	I_C=25mA ; I_B= 0	60			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 2A; I_B= 0.05A			1.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 80V; I_E= 0			100	μA
I_{CEO}	Collector Cutoff Current	V_{CE}= 40V; I_B= 0			100	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 6V; I_C= 0			100	μA
h_{FE}	DC Current Gain	I_C= 0.5A; V_{CE}= 4V	500		2500	
f_T	Current-Gain—Bandwidth Product	I_C= 0.2A; V_{CE}= 12V,f= 10MHz		50		MHz

◆ **h_{FE}-Classifications**

Q	P	O
500-1000	800-1500	1200-2500

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