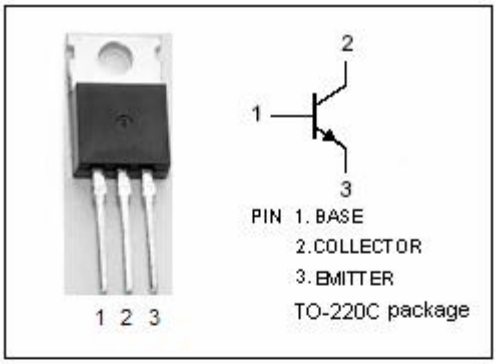
isc Silicon NPN Power Transistor — 2SD1135



DESCRIPTION

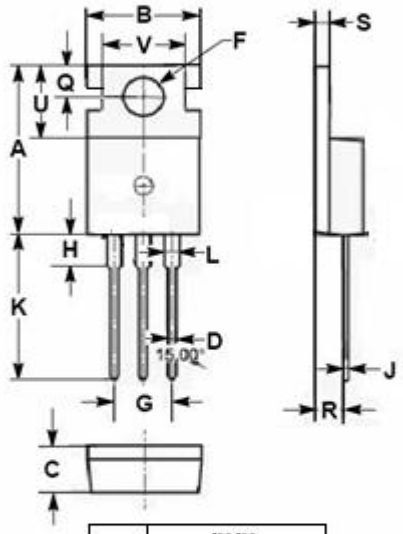
- Collector Current: I_C= 4A
- Low Collector Saturation Voltage
  : $V_{CE(sat)}$= 2.0V(Max)@I_C= 2A
- High Collector Power Dissipation
- Complement to Type 2SB859
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low frequency power amplifier applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	4	A
I_{CM}	Collector Current-Peak	8	A
P_C	Total Power Dissipation @ T_C=25℃	40	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-45~150	℃



DIM	mm MIN	mm MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 10mA; R_{BE}= ∞	80			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 10 μA; I_C= 0	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 2A; I_B= 0.2A			2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= 1A; V_{CE}= 5V			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 80V; I_E= 0			100	μA
h_{FE-1}	DC Current Gain	I_C= 1A; V_{CE}= 5V	60		200	
h_{FE-2}	DC Current Gain	I_C= 0.1A; V_{CE}= 5V	35			
C_{OB}	Collector Output Capacitance	I_E= 0; V_{CB}= 20V; f= 1MHz		40		pF
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A; V_{CE}= 5V		10		MHz

◆ **h_{FE-1} Classifications**

B	C
60-120	100-200

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