

isc Silicon NPN Power Transistor

2SD1135

DESCRIPTION

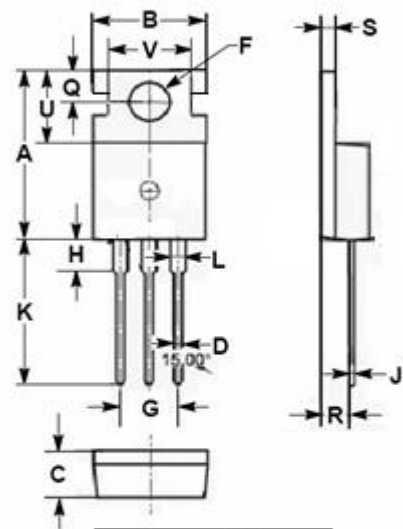
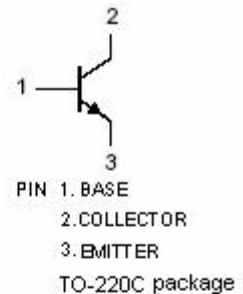
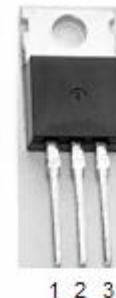
- Collector Current: $I_C = 4A$
- Low Collector Saturation Voltage
: $V_{CE(sat)} = 2.0V(Max) @ I_C = 2A$
- High Collector Power Dissipation
- Complement to Type 2SB859
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low frequency power amplifier applications.

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ C$)

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 @ $T_C = 25^\circ C$	40	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-45~150	$^\circ C$



DIM	mm	
	MIN	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°C 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 μ A; 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	μ A
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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