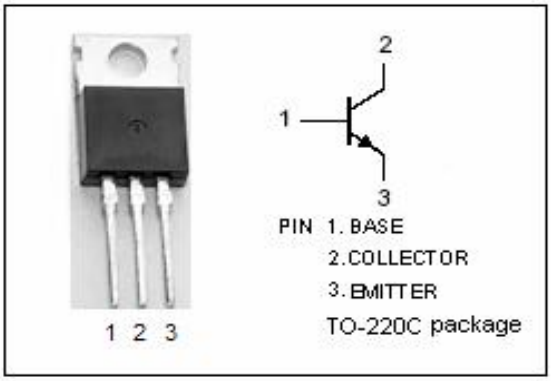
isc Silicon NPN Power Transistors — BLD137DL



DESCRIPTION

- With TO-220 packaging
- Reliable performance at higher powers
- Accurate reproduction of Input signal
- Greater dynamic range
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

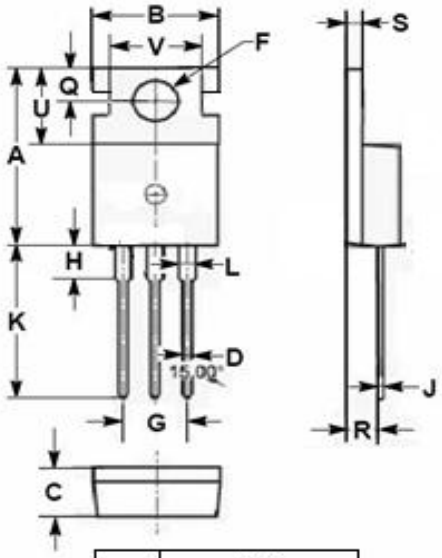
- Switching regulators
- High frequency inverters
- General purpose power amplifiers

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	400	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	9	V
I_C	Collector Current-Continuous	12	A
P_T	Total Power Dissipation	80	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	0.63	℃/W



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℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 10mA; I_B= 0	200			V
V_{CBO}	Collector-Base Voltage	I_C= 1mA; I_E= 0	400			V
V_{EBO}	Emitter-Base Voltage	I_E= 1mA; I_C= 0	9			V
$V_{CE(sat)1}$	Collector-Emitter Saturation Voltage	I_C= 2A; I_B= 0.4A			0.5	V
$V_{CE(sat)2}$	Collector-Emitter Saturation Voltage	I_C= 10A; I_B= 2A			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 10A;V_{CE}= 2V			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 400V			100	μA
I_{CEO}	Collector Cutoff Current	V_{CE}= 200V; I_B= 0			250	μA
h_{FE-1}	DC Current Gain	I_C= 10mA; V_{CE}= 5V	7			
h_{FE-2}	DC Current Gain	I_C= 2A; V_{CE}= 5V	10		40	
h_{FE-3}	DC Current Gain	I_C= 12A; V_{CE}= 5V	5			