

NPN BD130

SILICON TRANSISTOR HOMOBASE

LF Large signal power amplification High current switching Regulated DC power supply Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings		Value	Unit
V _{CEO}	Collector-Emitter Voltage		60	V
V _{CBO}	Collector-Base Voltage		100	V
V _{CEX}	Collector-Emitter Voltage	V _{BE} =-1.5 V	100	V
Ic	Collector Current		15	А
IB	Base Current		7	А
Ρτ	Power Dissipation	@ T _C = 45°	100	W
TJ	Junction Temperature		-55 to +200	°C
Ts	Storage Temperature		-55 10 +200	C

THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
R _{thJ-C}	Thermal Resistance, Junction to Case	1.55	°C/W



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ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)	Min	Тур	Max	Unit
V _{CEO(BR)}	Collector-Emitter Breakdown Voltage (*)	I _C =200 mA, I _B =0	60			V
V _{CE(SAT)}	Collector-Emitter Saturation Voltage (*)	I _C =4 A, I _B =0.4 A	-	0.5	1.1	V
	Collector-Emitter Cutoff Current	V _{CE} =100 V, V _{BE} =-1.5 V	-	-	0.5	
I _{CEX}		V _{CE} =100 V, V _{BE} =-1.5 V T _{CASE} =150°C	-	-	30	mA
I _{EBO}	Emitter-Base Cutoff Current	V _{EB} =7 V	-	-	5.0	mA
V _{BE}	Base-Emitter Voltage (*)	I _C =4.0 A, V _{CE} =4.0V	-	0.95	1.8	V
f _T	Transition Frequency	I _C =0.1 A, V _{CE} =4 V		1.1		MHz
h _{21E}	Static Forward Current Transfer Ratio (*)	V_{CE} =4.0 V, I _C =4.0 A	20	-	70	-

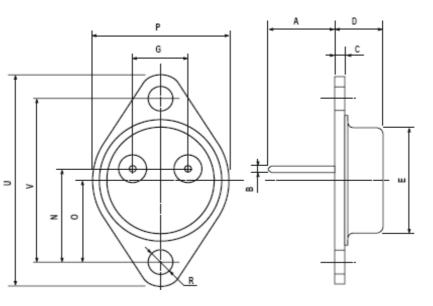
(*) Pulse Width $\approx 300~\mu s,$ Duty Cycle $\angle 2.0\%$



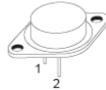
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MECHANICAL DATA CASE TO-3

DIMENSIONS (mm)		
	min	max
А	11	13.10
В	0.97	1.15
С	1.5	1.65
D	8.32	8.92
F	19	20
G	10.70	11.1
N	16.50	17.20
Р	25	26
R	4	4.09
U	38.50	39.30
V	30	30.30



Pin 1 :	Base
Pin 2 :	Emitter
Case :	Collector



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