BDV65-A-B-C

NNP SILICON DARLINGTONS POWER TRANSISTORS

They are silicon epitaxial base transistors mounted in TO-3PN.
Theyare designed for audio output stages and general amplifier and switching applications.
complementary is BDV64-A- B-C
Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings		Value	Unit
V_{CEO}	Collector-Emitter Voltage	BDV65	60	V
		BDV65A	80	
		BDV65B	100	
		BDV65C	120	
V_{CBO}	Collector-Base Voltage	BDV65	60	V
		BDV65A	80	
		BDV65B	100	
		BDV65C	120	
V_{EBO}	Emitter-Base Voltage	BDV65	5.0	V
		BDV65A		
		BDV65B		
		BDV65C		
I_C	Collector Current	BDV65	12	A
		BDV65A		
		BDV65B		
		BDV65C		
I_{CM}	Collector Peak Current	BDV65	15	
		BDV65A		
		BDV65B		
		BDV65C		
I_B	Base Current	BDV65	0.5	A
		BDV65A		
		BDV65B		
		BDV65C		

BDV65-A-B-C

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings			Value	Unit
P_T	Power Dissipation	T_{mb} = 25° C	BDV65	125	Watts
			BDV65A		
			BDV65B		
			BDV65C		
		T_{mb} = 25° C	BDV65	3.5	
			BDV65A		
			BDV65B		
			BDV65C		
T_J	Junction Temperature		BDV65	150	°C
			BDV65A		
			BDV65B		
			BDV65C		
T_S	Storage Temperature		BDV65	-65 to +150	
			BDV65A		
			BDV65B		
			BDV65C		

THERMAL CHARACTERISTICS

Symbol	Ratings		Value	Unit
R_{thj-c}	Thermal Resistance, Junction to Case	BDV65	1	°C / W
		BDV65A		
		BDV65B		
		BDV65C		
R_{thj-a}	Thermal Resistance, Junction to Ambient	BDV65	35.7	
		BDV65A		
		BDV65B		
		BDV65C		

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ELECTRICAL CHARACTERISTICS

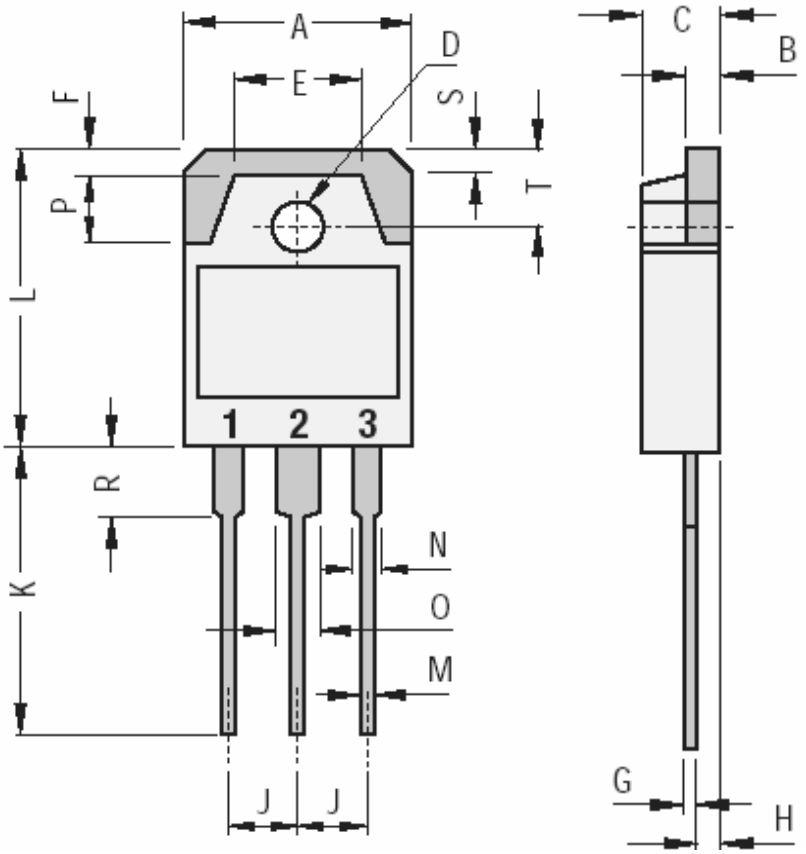
TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)			Min	Typ	Mx	Unit
I_{CEO}	Collector Cutoff Current	V_{CE}= 30 V, I_B= 0		BDV65	-	-	2	mA
		V_{CE}= 40 V, I_B= 0		BDV65A				
		V_{CE}= 50 V, I_B= 0		BDV65B				
		V_{CE}= 60 V, I_B= 0		BDV65C				
I_{EBO}	Emitter Cutoff Current	V_{BE}= 5 V, I_C= 0		BDV65	-	-	5	mA
				BDV65A				
				BDV65B				
				BDV65C				
I_{CBO}	Collector Cutoff Current	I_E= 0 T_j=25°C	V_{CB}= 60 V	BDV65	-	-	0.4	mA
			V_{CB}= 80 V	BDV65A				
			V_{CB}= 100 V	BDV65B				
			V_{CB}= 120 V	BDV65C				
		I_E= 0 T_j=150°C	V_{CB}= 30 V	BDV65	-	-	2	
			V_{CB}= 40 V	BDV65A				
			V_{CB}= 50 V	BDV65B				
			V_{CB}= 60 V	BDV65C				
V_{CEO}	Collector-Emitter Breakdown Voltage (*)	I_C= 30 mA, I_B = 0		BDV65	60	-	-	V
				BDV65A	80	-		
				BDV65B	100	-	-	
				BDV65C	120	-	-	
h_{FE}	DC Current Gain (*)	V_{CE}= 4 V, I_C= 5 A		BDV65	1000	-	-	-
				BDV65A				
				BDV65B				
				BDV65C				
$V_{CE(SAT)}$	Collector-Emitter saturation Voltage (*)	I_C= 5 A, I_B= 20 mA		BDV65	-	-	2	V
				BDV65A				
				BDV65B				
				BDV65C				
V_{BE}	Base-Emitter Voltage(*)	V_{CE}= 4 V, I_C= 5 A		BDV65	-	-	2,5	V
				BDV65A				
				BDV65B				
				BDV65C				

(*) Pulse Width ≈ 300 μs, Duty Cycle ∠ 1.5 %

BDV65-A-B-C

MECHANICAL DATA CASE TO3PN Non Isolated Plastic Package



DIMENSIONS (mm)		
	Min.	Max.
A	15.20	1600
B	1.90	2.10
C	4.60	5.00
D	3.10	3.30
E		9.60
F		2.00
G	0.35	0.55
H		1.40
J	5.35	5.55
K	20.00	
L	19.60	20.20
M	0.95	1.25
N		2.00
O		3.00
P		4.00
R		4.00
S		1.80
T	4.80	5.20

Pin 1 :	Base
Pin 2 :	Collector
Pin 3 :	Emitter
Package	Collector

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