BDV66-A-B-C

PNP 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 BDV67-A-B-C
Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings		Value	Unit
V_{CEO}	Collector-Emitter Voltage	BDV66	-80	V
		BDV66A	-100	
		BDV66B	-120	
		BDV66C	-140	
V_{CBO}	Collector-Base Voltage	BDV66	-80	V
		BDV66A	-100	
		BDV66B	-120	
		BDV66C	-140	
V_{EBO}	Emitter-Base Voltage	BDV66	-5.0	V
		BDV66A		
		BDV66B		
		BDV66C		
I_C	Collector Current	BDV66	-16	A
		BDV66A		
		BDV66B		
		BDV66C		
I_{CM}	Collector Peak Current	BDV66	-20	
		BDV66A		
		BDV66B		
		BDV66C		
I_B	Base Current	BDV66	-0.5	A
		BDV66A		
		BDV66B		
		BDV66C		

BDV66-A-B-C

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings			Value	Unit
P_T	Power Dissipation	T_{mb} = 25°C	BDV66	175	Watts
			BDV66A		
			BDV66B		
			BDV66C		
T_J	Junction Temperature		BDV66	150	℃
			BDV66A		
			BDV66B		
			BDV66C		
T_S	Storage Temperature		BDV66	-65 to +150	
			BDV66A		
			BDV66B		
			BDV66C		

THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
R_{thj-c}	Thermal Resistance, Junction to Case	0.625	℃ / W

SWITCHING TIMES

Symbol	Ratings	Test Condition(s)	Value			Unit
			Min	Typ	Max	
t_{on}	turn-on time	I_C= 10 A , V_{CC}= 12 V	-	1	-	µs
t_{off}	turn-off time	I_{B1} = -I_{B2} = 40 mA	-	3.5	-	

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

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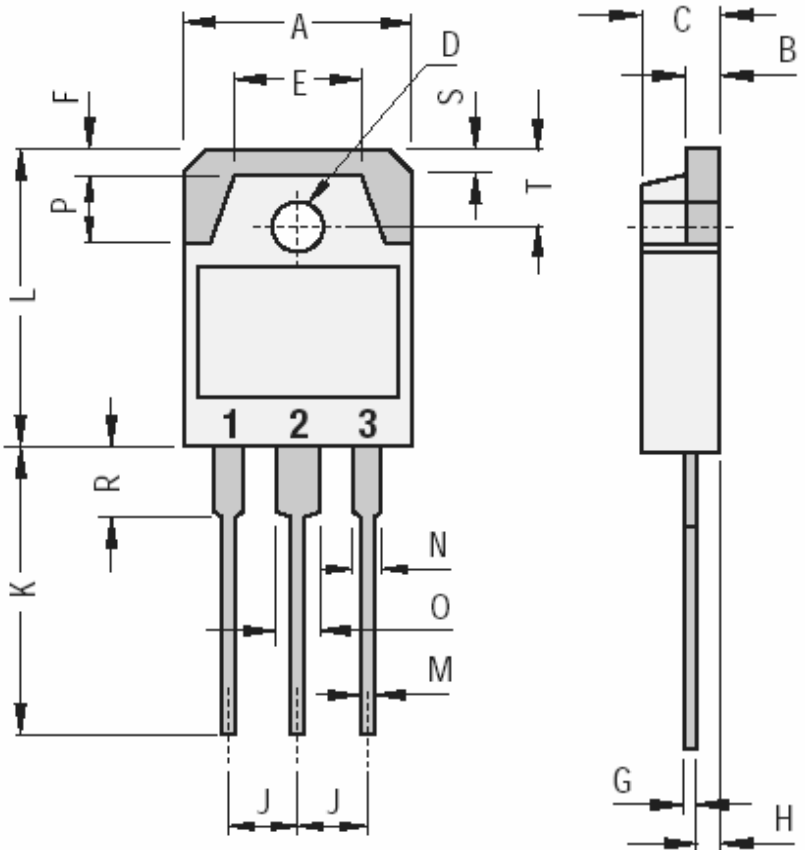
ELECTRICAL CHARACTERISTICS

TC=25℃ unless otherwise noted

Symbol	Ratings	Test Condition(s)			Min	Typ	Max	Unit
I_{CEO}	Collector Cutoff Current	V_{CE}= -40 V, I_B= 0		BDV66	-	-	-1	mA
		V_{CE}= -50 V, I_B= 0		BDV66A				
		V_{CE}= -60 V, I_B= 0		BDV66B				
		V_{CE}= -70 V, I_B= 0		BDV66C				
I_{EBO}	Emitter Cutoff Current	V_{BE}= -5 V, I_C= 0		BDV66	-	-	-5	mA
				BDV66A				
				BDV66B				
				BDV66C				
I_{CBO}	Collector Cutoff Current	I_E= 0 T_j=25℃	V_{CB}= -80 V	BDV66	-	-	-1	mA
			V_{CB}= -100 V	BDV66A				
			V_{CB}= -120 V	BDV66B				
			V_{CB}= -140 V	BDV66C				
		I_E= 0 T_j=150℃	V_{CB}= -40 V	BDV66	-	-	-5	
			V_{CB}= -50 V	BDV66A				
			V_{CB}= -60 V	BDV66B				
			V_{CB}= -70 V	BDV66C				
V_{CEO}	Collector-Emitter Breakdown Voltage (*)	I_C= -100 mA, I_B = 0		BDV66	-60	-	-	V
				BDV66A	-80	-		
				BDV66B	-100	-	-	
				BDV66C	-120	-	-	
h_{FE}	DC Current Gain (*)	V_{CE}= -3 V, I_C= -10 A		BDV66	1000	-	-	-
				BDV66A				
				BDV66B				
				BDV66C				
$V_{CE(SAT)}$	Collector-Emitter saturation Voltage (*)	I_C= -10 A, I_B= -40 mA		BDV66	-	-	-2	V
				BDV66A				
				BDV66B				
				BDV66C				
V_{BE}	Base-Emitter Voltage(*)	V_{CE}= -3 V, I_C= -10 A		BDV66	-	-	-2,5	V
				BDV66A				
				BDV66B				
				BDV66C				
C_{OB}	Output Capacitance	V_{CB}= -10 V, I_E= 0 f_{test}= 1 MHz		BDV66	-	300	-	pF
				BDV66A				
				BDV66B				
				BDV66C				

BDV66-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

Revised August 2012