



BDV66-A-B-C

PNP SILICON DARLINGTONS POWER TRANSISTORS

They are silicon epitaxial base transistors mounted in TO-3PN.
They are 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	A
		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	$T_{mb} = 25^{\circ}C$	BDV66	175	Watts	
			BDV66A			
			BDV66B			
			BDV66C			
T_J	Junction Temperature		BDV66	150	$^{\circ}C$	
			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	$^\circ C / W$

SWITCHING TIMES

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

(*) Pulse Width $\approx 300 \mu s$, Duty Cycle $\angle 1.5 \%$

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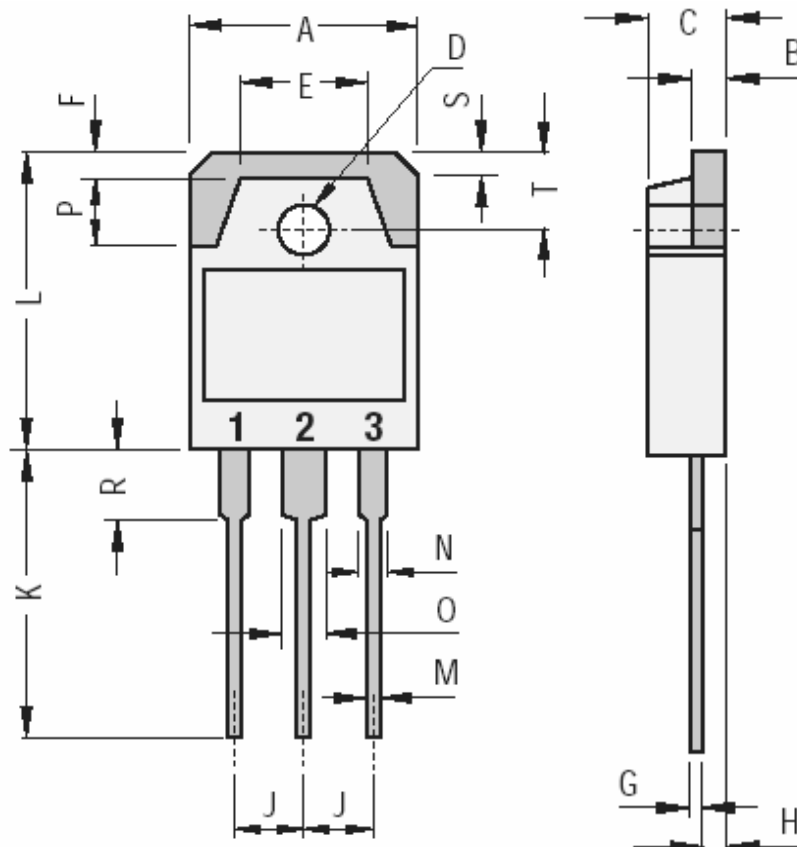
ELECTRICAL CHARACTERISTICS

TC=25°C 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°C	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°C	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				

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MECHANICAL DATA CASE TO3PN Non Isolated Plastic Package



DIMENSIONS (mm)		
	Min.	Max.
A	15.20	16.00
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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