



## BDV64-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 BDV65-A-B-C  
Compliance to RoHS.

#### ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings		Value	Unit
$V_{CEO}$	Collector-Emitter Voltage	BDV64	-60	V
		BDV64A	-80	
		BDV64B	-100	
		BDV64C	-120	
$V_{CBO}$	Collector-Base Voltage	BDV64	-60	V
		BDV64A	-80	
		BDV64B	-100	
		BDV64C	-120	
$V_{EBO}$	Emitter-Base Voltage	BDV64	-5.0	V
		BDV64A		
		BDV64B		
		BDV64C		
$I_C$	Collector Current	BDV64	-12	A
		BDV64A		
		BDV64B		
		BDV64C		
$I_{CM}$	Collector Peak Current	BDV64	-15	A
		BDV64A		
		BDV64B		
		BDV64C		
$I_B$	Base Current	BDV64	-0.5	A
		BDV64A		
		BDV64B		
		BDV64C		

## BDV64-A-B-C

### ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings			Value	Unit
P <sub>T</sub>	Power Dissipation	T <sub>mb</sub> = 25° C	BDV64	125	W
			BDV64A		
			BDV64B		
			BDV64C		
		T <sub>mb</sub> = 25° C	BDV64	3.5	
			BDV64A		
			BDV64B		
			BDV64C		
T <sub>J</sub>	Junction Temperature	BDV64	150	°C	
		BDV64A			
		BDV64B			
		BDV64C			
T <sub>s</sub>	Storage Temperature	BDV64	-65 to +150		
		BDV64A			
		BDV64B			
		BDV64C			

### THERMAL CHARACTERISTICS

Symbol	Ratings		Value	Unit
R <sub>thj-c</sub>	Thermal Resistance, Junction to Case	BDV64	1	°C / W
		BDV64A		
		BDV64B		
		BDV64C		
R <sub>thj-a</sub>	Thermal Resistance, Junction to Ambient	BDV64	35.7	
		BDV64A		
		BDV64B		
		BDV64C		

## BDV64-A-B-C

### ELECTRICAL CHARACTERISTICS

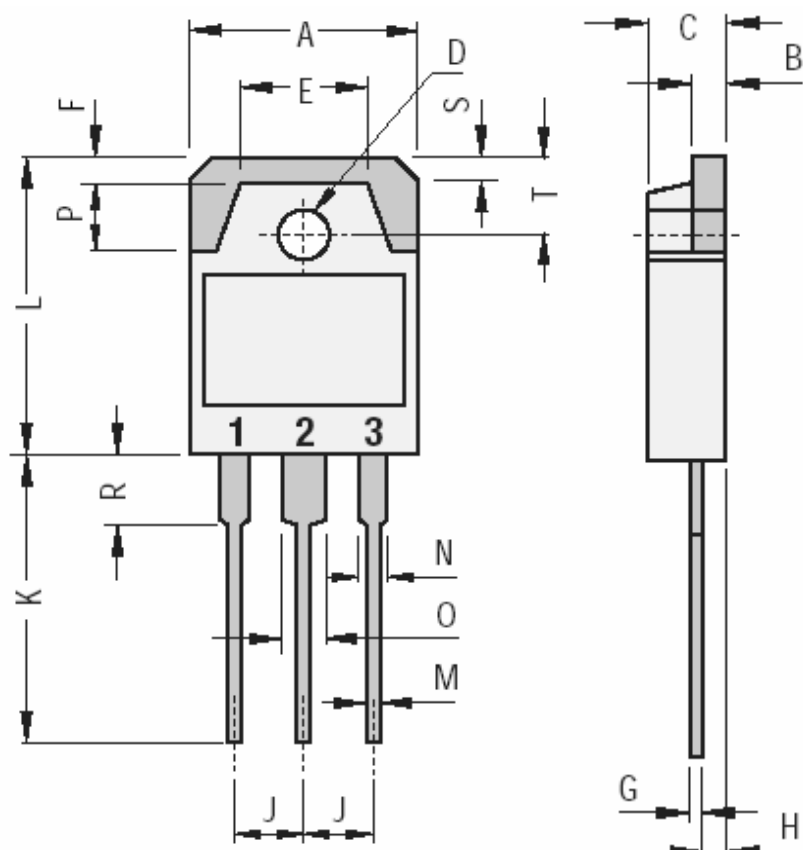
TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)		Min	Typ	Max	Unit		
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = -30 V, I <sub>B</sub> = 0		-	-	-2	mA		
		V <sub>CE</sub> = -40 V, I <sub>B</sub> = 0							
		V <sub>CE</sub> = -50 V, I <sub>B</sub> = 0							
		V <sub>CE</sub> = -60 V, I <sub>B</sub> = 0							
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>BE</sub> = -5 V, I <sub>C</sub> = 0		-	-	-5	mA		
I <sub>CBO</sub>	Collector Cutoff Current	I <sub>E</sub> = 0 T <sub>J</sub> =25°C	V <sub>CB</sub> = -60 V	BDV64	-	-	-0.4	mA	
			V <sub>CB</sub> = -80 V	BDV64A					
			V <sub>CB</sub> = -100 V	BDV64B					
			V <sub>CB</sub> = -120 V	BDV64C					
		I <sub>E</sub> = 0 T <sub>J</sub> =150°C	V <sub>CB</sub> = -30 V	BDV64	-	-	-2		
			V <sub>CB</sub> = -40 V	BDV64A					
			V <sub>CB</sub> = -50 V	BDV64B					
			V <sub>CB</sub> = -60 V	BDV64C					
V <sub>CEO</sub>	Collector-Emitter Breakdown Voltage (*)	I <sub>C</sub> = -30 mA, I <sub>B</sub> = 0		BDV64	-60	-	-	V	
				BDV64A	-80	-	-		
				BDV64B	-100	-	-		
				BDV64C	-120	-	-		
h <sub>FE</sub>	DC Current Gain (*)	V <sub>CE</sub> = -4 V, I <sub>C</sub> = -5 A		BDV64	1000	-	-	-	
				BDV64A					
				BDV64B					
				BDV64C					
V <sub>CE(SAT)</sub>	Collector-Emitter saturation Voltage (*)	I <sub>C</sub> = -5 A, I <sub>B</sub> = -20 mA		BDV64	-	-	-2	V	
				BDV64A					
				BDV64B					
				BDV64C					
V <sub>BE</sub>	Base-Emitter Voltage(*)	V <sub>CE</sub> = -4 V, I <sub>C</sub> = -5 A		BDV64	-	-	-2,5	V	
				BDV64A					
				BDV64B					
				BDV64C					

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

## BDV64-A-B-C

### 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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