



## 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	
$P_T$	Power Dissipation	$T_{mb} = 25^\circ \text{C}$	BDV64	125	W
			BDV64A		
			BDV64B		
			BDV64C		
		$T_{mb} = 25^\circ \text{C}$	BDV64	3.5	
			BDV64A		
			BDV64B		
			BDV64C		
$T_J$	Junction Temperature	BDV64	150	$^\circ\text{C}$	
		BDV64A			
		BDV64B			
		BDV64C			
$T_s$	Storage Temperature	BDV64	-65 to +150		
		BDV64A			
		BDV64B			
		BDV64C			

### THERMAL CHARACTERISTICS

Symbol	Ratings		Value	Unit
$R_{thj-c}$	Thermal Resistance, Junction to Case	BDV64	1	$^\circ\text{C} / \text{W}$
		BDV64A		
		BDV64B		
		BDV64C		
$R_{thj-a}$	Thermal Resistance, Junction to Ambient	BDV64	35.7	
		BDV64A		
		BDV64B		
		BDV64C		

## BDV64-A-B-C

### ELECTRICAL CHARACTERISTICS

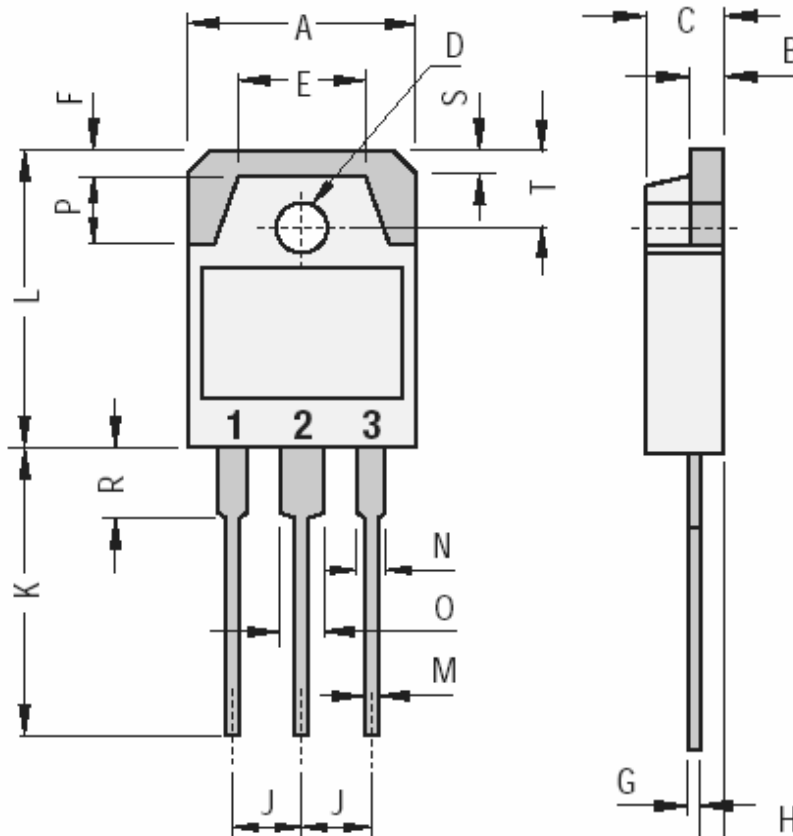
TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)		Min	Typ	Max	Unit	
$I_{CEO}$	Collector Cutoff Current	$V_{CE} = -30\text{ V}, I_B = 0$	BDV64	-	-	-2	mA	
		$V_{CE} = -40\text{ V}, I_B = 0$	BDV64A					
		$V_{CE} = -50\text{ V}, I_B = 0$	BDV64B					
		$V_{CE} = -60\text{ V}, I_B = 0$	BDV64C					
$I_{EBO}$	Emitter Cutoff Current	$V_{BE} = -5\text{ V}, I_C = 0$	BDV64	-	-	-5	mA	
			BDV64A					
			BDV64B					
			BDV64C					
$I_{CBO}$	Collector Cutoff Current	$I_E = 0$ $T_j = 25^\circ\text{C}$	$V_{CB} = -60\text{ V}$	BDV64	-	-	-0.4	mA
			$V_{CB} = -80\text{ V}$	BDV64A				
			$V_{CB} = -100\text{ V}$	BDV64B				
			$V_{CB} = -120\text{ V}$	BDV64C				
		$I_E = 0$ $T_j = 150^\circ\text{C}$	$V_{CB} = -30\text{ V}$	BDV64	-	-	-2	
			$V_{CB} = -40\text{ V}$	BDV64A				
			$V_{CB} = -50\text{ V}$	BDV64B				
			$V_{CB} = -60\text{ V}$	BDV64C				
$V_{CEO}$	Collector-Emitter Breakdown Voltage (*)	$I_C = -30\text{ mA}, I_B = 0$	BDV64	-60	-	-	V	
			BDV64A	-80	-	-		
			BDV64B	-100	-	-		
			BDV64C	-120	-	-		
$h_{FE}$	DC Current Gain (*)	$V_{CE} = -4\text{ V}, I_C = -5\text{ A}$	BDV64	1000	-	-	-	
			BDV64A					
			BDV64B					
			BDV64C					
$V_{CE(SAT)}$	Collector-Emitter saturation Voltage (*)	$I_C = -5\text{ A}, I_B = -20\text{ mA}$	BDV64	-	-	-2	V	
			BDV64A					
			BDV64B					
			BDV64C					
$V_{BE}$	Base-Emitter Voltage(*)	$V_{CE} = -4\text{ V}, I_C = -5\text{ A}$	BDV64	-	-	-2,5	V	
			BDV64A					
			BDV64B					
			BDV64C					

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

## BDV64-A-B-C

### MECHANICAL DATA CASE TO3PN Non Isolated Plastic Package



DIMENSIONS (mm)		
	Min.	Max.
A	15.20	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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