



## 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	$^\circ\text{C}$	
		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	$^\circ\text{C} / \text{W}$
		BDV64A		
		BDV64B		
		BDV64C		



## BDV64-A-B-C

### ELECTRICAL CHARACTERISTICS

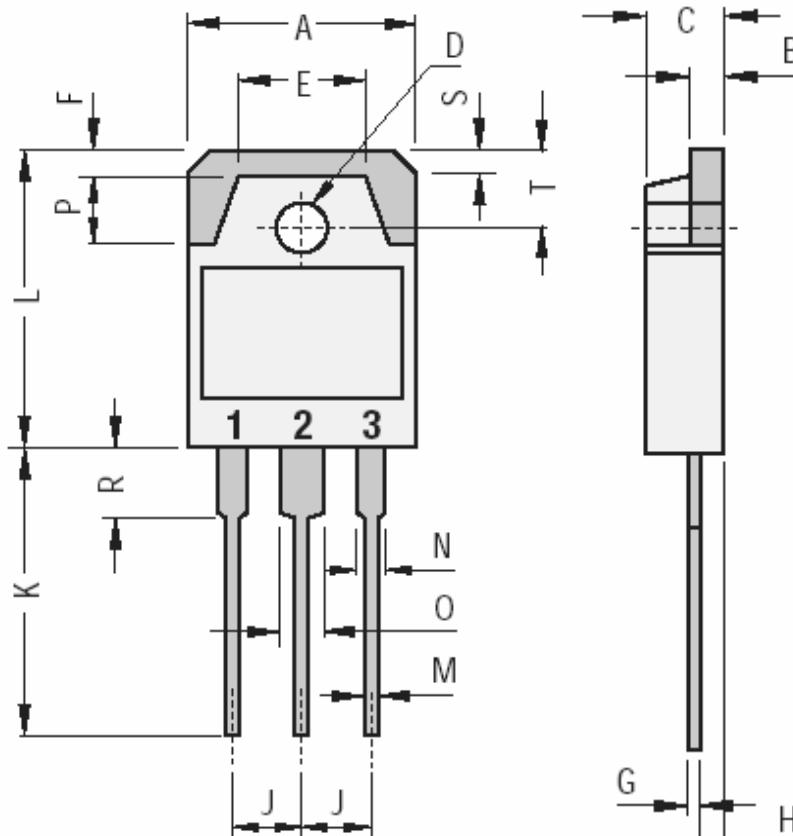
TC=25°C unless otherwise noted

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

Revised August 2012

Information furnished is believed to be accurate and reliable. However, Comset Semiconductors assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. Data are subject to change without notice. Comset Semiconductors makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Comset Semiconductors assume any liability arising out of the application or use of any product and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Comset Semiconductors' products are not authorized for use as critical components in life support devices or systems.