BDX 64, A, B, C

PNP SILICON DARLINGTONS

General purpose darlingtons designed for power amplifier and switching applications.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings			Value	Unit
V_{CEO}	Collector-Emitter Voltage		**BDX64**	-60	V
			BDX64A	-80	
			BDX64B	-100	
			BDX64C	-120	
V_{CEV}	Collector-EmitterVoltage	V_{BE}=-1.5 V	**BDX64**	-60	V
			BDX64A	-80	
			BDX64B	-100	
			BDX64C	-120	
V_{EBO}	Emitter-Base Voltage		**BDX64** **BDX64A** **BDX64B** **BDX64C**	-5.0	V
I_C	Collector Current	$I_{C(RMS)}$	**BDX64** **BDX64A** **BDX64B** **BDX64C**	-12	A
		I_{CM}	**BDX64** **BDX64A** **BDX64B** **BDX64C**	-16	

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Symbol	Ratings			Value	Unit
I_B	Base Current		**BDX64 BDX64A BDX64B BDX64C**	0.2	A
P_T	Power Dissipation	@ T_C = 25°	**BDX64 BDX64A BDX64B BDX64C**	117	Watts W/°C
T_J	Junction Temperature		**BDX64 BDX64A BDX64B BDX64C**	-55 to +200	°C
T_S	Storage Temperature				

THERMAL CHARACTERISTICS

Symbol	Ratings		Value	Unit
R_{thJ-C}	Thermal Resistance, Junction to Case	**BDX64 BDX64A BDX64B BDX64C**	1.5	°C/W

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ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)		Min	Typ	Mx	Unit
$V_{CEO(SUS)}$	Collector-Emitter Breakdown Voltage (*)	I_C=-0.1 A, I_B=0, L=25mH	**BDX64**	-60	-	-	V
			BDX64A	-80	-	-	
			BDX64B	-100	-	-	
			BDX64C	-120	-	-	
I_{CEO}	Collector Cutoff Current	V_{CE}=-30 V	**BDX64**	-	-	-1.0	mA
		V_{CE}=-40 V	**BDX64A**	-	-		
		V_{CE}=-50 V	**BDX64B**	-	-		
		V_{CE}=-60 V	**BDX64C**	-	-		
I_{EBO}	Emitter Cutoff Current	V_{BE}=-5 V	**BDX64 BDX64A BDX64B BDX64C**	-	-	-5.0	mA

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Symbol	Ratings	Test Condition(s)		Min	Typ	Mx	Unit
I_{CBO}	Collector-Base Cutoff Current	V_{CBO}=-60 V	**BDX64**	-	-	0.2	-
		V_{CBO}=-60 V T_{CASE}=150°C		-	-	2	
		V_{CBO}=-80 V	**BDX64A**	-	-	0.2	
		V_{CBO}=-80 V T_{CASE}=150°C		-	-	2	
		V_{CBO}=-100 V	**BDX64B**	-	-	0.2	
		V_{CBO}=-100 V T_{CASE}=150°C		-	-	2	
		V_{CBO}=-120 V	**BDX64C**	-	-	0.2	
		V_{CBO}=-120 V T_{CASE}=150°		-	-	2	
$V_{CE(SAT)}$	Collector-Emitter saturation Voltage (*)	I_C=-5.0 A, I_B=-20 mA	**BDX64 BDX64A BDX64B BDX64C**	-	-	-2	V
V_F	Forward Voltage (pulse method)	I_F=5 A	**BDX64 BDX64A BDX64B BDX64C**	-	1.8	-	V
V_{BE}	Base-Emitter Voltage (*)	I_C=-5.0 A, V_{CE}=-3V	**BDX64 BDX64A BDX64B BDX64C**	-	-	-2.5	V
F_{h21e}	Forward current transfer ratio Cutoff frequency	V_{CE}=3 V, I_C=5 A	**BDX64 BDX64A BDX64B BDX64C**	-	60	-	KHz

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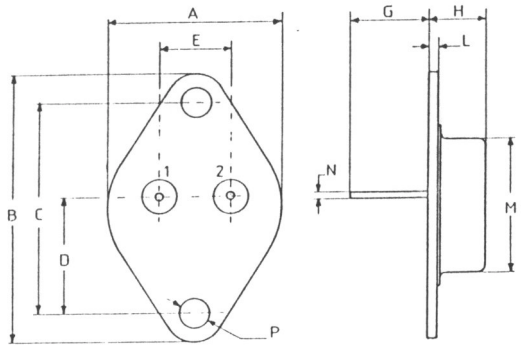
Symbol	Ratings	Test Condition(s)		Min	Typ	Mx	Unit
f_T	Transition Frequency	V_{CE}=-3 V, I_C=-5 A, f=1 MHz	**BDX64 BDX64A BDX64B BDX64C**	-	7	-	MHz
h_{21E}	Static forward current transfer ratio (*)	V_{CE}=-3 V, I_C=-1 A	**BDX64 BDX64A BDX64B BDX64C**	-	1500	-	-
		V_{CE}=-3 V, I_C=-5 A	**BDX64 BDX64A BDX64B BDX64C**	1000	-	-	
		V_{CE}=-3 V, I_C=-12 A	**BDX64 BDX64A BDX64B BDX64C**	-	750	-	

(*) Pulse Width ≈ 300 µs, Duty Cycle ∠ 2.0%
(1) collector-Emitter voltage limited et V_{CEci} = V rated by an auxiliary circuit

MECHANICAL DATA CASE TO-3

DIMENSIONS		
	mm	inches
A	25,51	1,004
B	38,93	1,53
C	30,12	1,18
D	17,25	0,68
E	10,89	0,43
G	11,62	0,46
H	8,54	0,34
L	1,55	0,6
M	19,47	0,77
N	1	0,04
P	4,06	0,16



Pin 1 :	Base
Pin 2 :	Collector
Case :	Emitter