COMSET SEMICONDUCTORS

BDX64, 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	

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

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

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
I_{CBO}	*Collector-Base Cutoff Current*	V_{CBO}=-60 V	**BDX64**	-	-	0.2	-
		V_{CBO}=-40 V T_{CASE}=200°C		-	-	2	
		V_{CBO}=-80 V	**BDX64A**	-	-	0.2	
		V_{CBO}=-50 V T_{CASE}=200°C		-	-	2	
		V_{CBO}=-100 V	**BDX64B**	-	-	0.2	
		V_{CBO}=-60 V T_{CASE}=200°C		-	-	2	
		V_{CBO}=-120 V	**BDX64C**	-	-	0.2	
		V_{CBO}=-70 V T_{CASE}=200°		-	-	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

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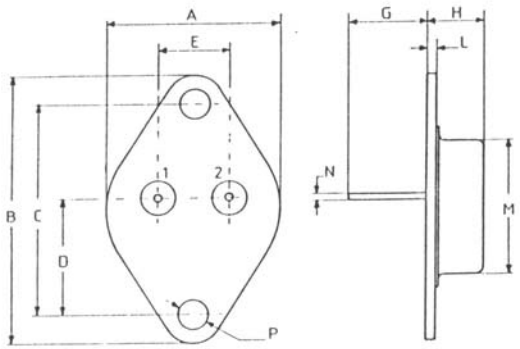
V_{BE}	*Base-Emitter Voltage (*)*	I_C=-5.0 A, V_{CE}=-3V	**BDX64 BDX64A BDX64B BDX64C**	-	-	-2.5	V
F_{hfe}	*Cut-off frequency*	-V_{CE}=3 V,-I_C=5 A	**BDX64 BDX64A BDX64B BDX64C**	-	80	-	kHz
f_T	*Transition Frequency*	V_{CE}=-3 V, I_C=-5 A, f=1 MHz	**BDX64 BDX64A BDX64B BDX64C**	-	7	-	MHz
h_{FE}	*D.C. current gain (*)*	-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 :	Emitter
Case :	Collector

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