COMSET
SEMICONDUCTORS

BDY26, 183 T2
BDY27, 184 T2
BDY28, 185 T2

NPN SILICON TRANSISTORS, DIFFUSED MESA

LF Large Signal Power Amplification
High Current Fast Switching

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings			Value	Unit
V_{CEO}	*Collector-Emitter Voltage*		**BDY26, 183T2**	180	V
			BDY27, 184T2	200	
			BDY28, 185T2	250	
V_{CBO}	*Collector-Base Voltage*		**BDY26, 183T2**	300	V
			BDY27, 184T2	400	
			BDY28, 185T2	500	
V_{EBO}	*Emitter-Base Voltage*		**BDY26, 183T2** **BDY27, 184T2** **BDY28, 185T2**	10	V
I_C	*Collector Current*		**BDY26, 183T2** **BDY27, 184T2** **BDY28, 185T2**	6	A
I_B	*Base Current*		**BDY26, 183T2** **BDY27, 184T2** **BDY28, 185T2**	3	A
P_{TOT}	*Power Dissipation*	@ T_C = 25°	**BDY26, 183T2** **BDY27, 184T2** **BDY28, 185T2**	87.5	Watts
T_J	*Junction Temperature*		**BDY26, 183T2** **BDY27, 184T2** **BDY28, 185T2**	-65 to +200	°C
T_S	*Storage Temperature*				

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THERMAL CHARACTERISTICS

Symbol	Ratings		Value	Unit
R_{thJ-C}	*Thermal Resistance, Junction to Case*	**BDY26, 183T2 BDY27, 184T2 BDY28, 185T2**	2	°C/W

ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)		Min	Typ	Mx	Unit
$V_{CEO(BR)}$	*Collector-Emitter Breakdown Voltage (*)*	I_C=50 mA, I_B=0	**BDY26, 183T2**	180	-	-	V
			BDY27, 184T2	200	-	-	
			BDY28A, 185T2A	250	-	-	
			BDY28B, 185T2B	250	-	-	
			BDY28C, 185T2C	220	-	-	
I_{CEO}	*Collector-Emitter Cutoff Current*	V_{CE}=180 V	**BDY26**	-	-	1.0	mA
		V_{CE}=200 V	**BDY27**	-	-		
		V_{CE}=250 V	**BDY28**	-	-		
I_{EBO}	*Emitter-Base Cutoff Current*	V_{EB}=10 V	**BDY26, 183T2 BDY27, 184T2 BDY28, 185T2**	-	-	1.0	mA
I_{CES}	*Collector-Emitter Cutoff Current*	V_{CE}=250 V V_{BE}=0 V	**BDY26, 183T2**	-	-	1.0	mA
		V_{CE}=300 V V_{BE}=0 V	**BDY27, 184T2**	-	-		
		V_{CE}=400 V V_{BE}=0 V	**BDY28, 185T2**	-	-		

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$V_{CE(SAT)}$	*Collector-Emitter saturation Voltage (*)*	I_C=2.0 A, I_B=0.25 A	**BDY26, 183T2**	-	-	0.6	V
			BDY27, 184T2	-	-		
			BDY28, 185T2	-	-		
$V_{(BR)CBO}$	*Collector-Base Breakdown Voltage (*)*	I_C=3 mA	**BDY26, 183T2**	300	-	-	V
			BDY27, 184T2	400	-	-	
			BDY28, 185T2	500	-	-	
$V_{BE(SAT)}$	*Base-Emitter Voltage (*)*	I_C=2.0 A, I_B=0.25 A	**BDY26, 183T2**	-	-	1.2	V
			BDY27, 184T2	-	-		
			BDY28, 185T2	-	-		
h_{21E}	*Static Forward Current transfer ratio (*)*	V_{CE}=4 V, I_C=1 A	**A**	-	55	-	-
			B	-	65	-	
			C	-	90	-	
		V_{CE}=4 V, I_C=2 A	**A**	15	20	45	
			B	30	45	90	
			C	75	82	180	
f_T	*Transition Frequency*	V_{CE}=15 V, I_C=0.5 A, f=10 MHz	**BDY26, 183T2 BDY27, 184T2 BDY28, 185T2**	10	-	-	MHz
$t_d + t_r$	*Turn-on time*	I_C=5 A, I_B=1 A	**BDY26, 183T2 BDY27, 184T2 BDY28, 185T2**	-	-	1	μs
$t_s + t_f$	*Turn-off time*	I_C=5 A, I_{B1}=1 A, I_{B2}=-1 A	**A**	-	-	2	μs
			B			3.5	
			C			6	

(*) Pulse Width ≈ 300 μs, Duty Cycle ∠ 2.0%

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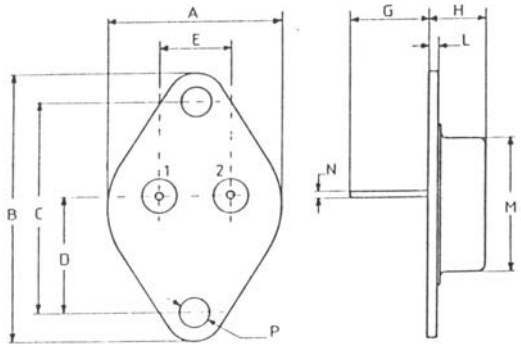
BDY28, 185 T2

MECHANICAL DATA

DIMENSIONS	
	mm
A	25,45
B	38,8
C	30,09
D	17,11
E	9,78
G	11,09
H	8,33
L	1,62
M	19,43
N	1
P	4,08



Pin 1 :	Base
Pin 2 :	Emitter
Case :	Collector