THERMAL DATA

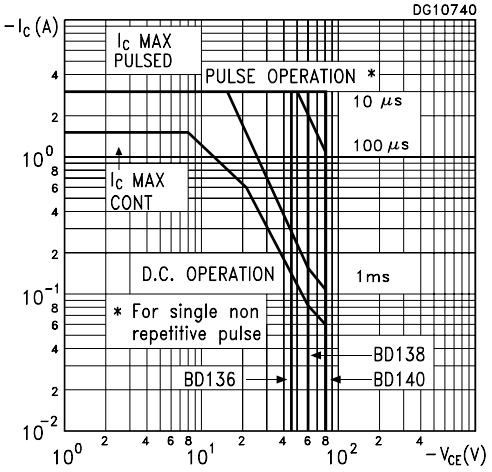
$R_{thj\text{-}case}$	Thermal Resistance Junction-case	Max	10	°C/W

ELECTRICAL CHARACTERISTICS (T_{case} = 25 °C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cut-off Current (I_E = 0)	V_{CB} = -30 V V_{CB} = -30 V T_C = 125 °C			-0.1 -10	µA µA
I_{EBO}	Emitter Cut-off Current (I_C = 0)	V_{EB} = -5 V			-10	µA
$V_{CEO(sus)}$*	Collector-Emitter Sustaining Voltage (I_B = 0)	I_C = -30 mA for **BD136** for **BD138** for **BD140**	 -45 -60 -80			 V V V
$V_{CE(sat)}$*	Collector-Emitter Saturation Voltage	I_C = -0.5 A I_B = -0.05 A			-0.5	V
V_{BE}*	Base-Emitter Voltage	I_C = -0.5 A V_{CE} = -2 V			-1	V
h_{FE}*	DC Current Gain	I_C = -5 mA V_{CE} = -2 V I_C = -150 mA V_{CE} = -2 V I_C = -0.5 A V_{CE} = -2 V	25 40 25		 250	
h_{FE}	h_{FE} Groups	I_C = -150 mA V_{CE} = -2 V for **BD136/BD140** group-10 for **BD136/BD140** group-16	 63 100		 160 250	

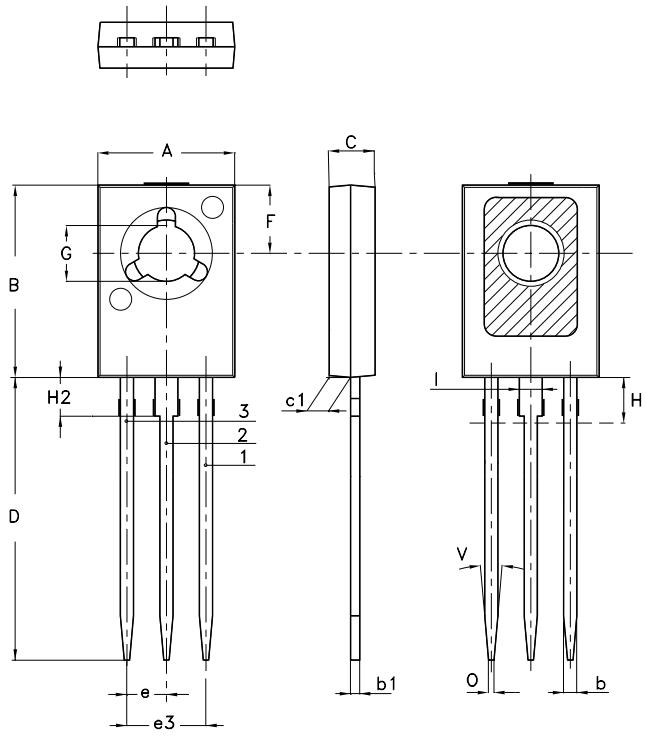
* Pulsed: Pulse duration = 300 µs, duty cycle 1.5 %

Safe Operating Areas



SOT-32 (TO-126) MECHANICAL DATA

DIM.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A	7.4		7.8	0.291		0.307
B	10.5		10.8	0.413		0.425
b	0.7		0.9	0.028		0.035
b1	0.40		0.65	0.015		0.025
C	2.4		2.7	0.094		0.106
c1	1.0		1.3	0.039		0.051
D	15.4		16.0	0.606		0.630
e		2.2			0.087	
e3		4.4			0.173	
F		3.8			0.150	
G	3		3.2	0.118		0.126
H			2.54			0.100
H2		2.15			0.084	
I		1.27			0.05	
O		0.3			0.011	
V		10^o			10^o	



1: Base
2: Collector
3: Emitter

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