THERMAL DATA

$R_{thj\text{-}case}$	Thermal Resistance Junction-case	Max	3.5	$^oC/W$
$R_{thj\text{-}amb}$	Thermal Resistance Junction-ambient	Max	100	$^oC/W$

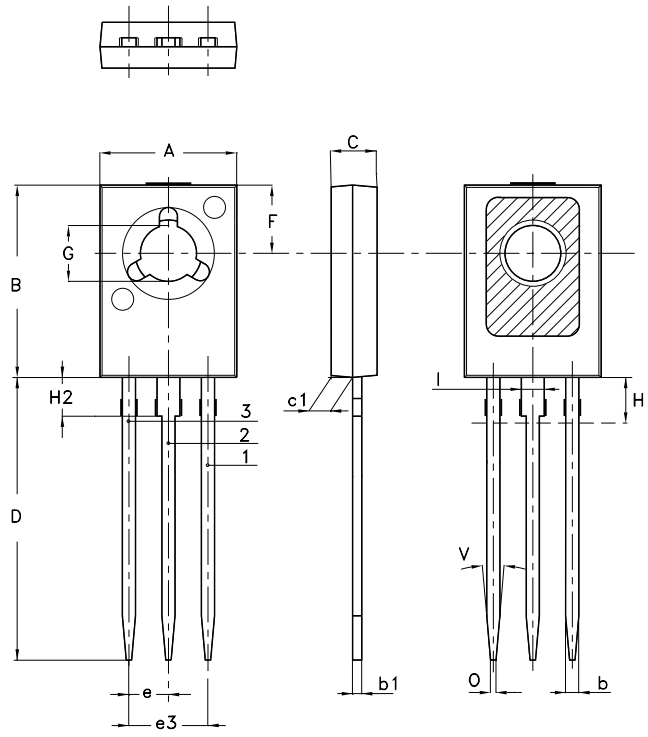
ELECTRICAL CHARACTERISTICS (T_{case} = 25 ^oC unless otherwise specified)

Symbol	Parameter	Test Conditions		Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cut-off Current (I_E = 0)	for **BD433/434**	V_{CB} = 22 V			100	µA
		for **BD435/436**	V_{CB} = 32 V			100	µA
		for **BD437/438**	V_{CB} = 45 V			100	µA
I_{CES}	Collector Cut-off Current (V_{BE} = 0)	for **BD433/434**	V_{CE} = 22 V			100	µA
		for **BD435/436**	V_{CE} = 32 V			100	µA
		for **BD437/438**	V_{CE} = 45 V			100	µA
I_{EBO}	Emitter Cut-off Current (I_C = 0)	V_{EB} = 5 V				1	mA
$V_{CEO(sus)}$*	Collector-Emitter Sustaining Voltage (I_B = 0)	I_C = 100 mA	for **BD433/434**	22			V
			for **BD435/436**	32			V
			for **BD437/438**	45			V
$V_{CE(sat)}$*	Collector-Emitter Saturation Voltage	I_C = 2 A	I_B = 0.2 A				
			for **BD433/434**		0.2	0.5	V
			for **BD435/436**		0.2	0.5	V
			for **BD437/438**		0.2	0.6	V
V_{BE}*	Base-Emitter Voltage	I_C = 10 mA	V_{CE} = 5 V		0.58		V
		I_C = 2 A	V_{CE} = 1 V				
			for **BD433/434**			1.1	V
			for **BD435/436**			1.1	V
			for **BD437/438**			1.2	V
h_{FE}*	DC Current Gain	I_C = 10 mA	V_{CE} = 5 V				
			for **BD433/434**	40	130		
			for **BD435/436**	40	130		
			for **BD437/438**	30	130		
		I_C = 500 mA	V_{CE} = 1 V	85	140		
		I_C = 2 A	V_{CE} = 1 V				
			for **BD433/434**	50			
			for **BD435/436**	50			
			for **BD437/438**	40			
h_{FE1}/h_{FE2}*	Matched Pair	I_C = 500 mA	V_{CE} = 1 V			1.4	
f_T	Transition frequency	I_C = 250 mA	V_{CE} = 1 V	3			MHz

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

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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