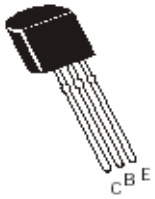
PNP SILICON DARLINGTON TRANSISTOR



BC516
TO-92
Plastic Package

For Lead Free Parts, Device Part # will be Prefixed with "T"

ABSOLUTE MAXIMUM RATINGS (T_a=25ºC)

DESCRIPTION	SYMBOL	VALUE	UNITS
Collector Emitter Voltage	V_{CEO}	30	V
Collector Base Voltage	V_{CBO}	40	V
Emitter Base Voltage	V_{EBO}	10	V
Collector Current Continuous	I_C	500	mA
Peak Collector Current	I_{CM}	800	mA
Total Power Dissipation	P_D	500	mW
Operating And Storage Junction Temperature Range	T_j, T_{stg}	150, - 55 to +150	ºC

ELECTRICAL CHARACTERISTICS (T_a=25ºC unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Collector Emitter Voltage	V_{CEO}	I_C=1mA, I_B=0	30		V
Collector Base Voltage	V_{CBO}	I_C=100µA, I_E=0	40		V
Emitter Base Voltage	V_{EBO}	I_E=10µA, I_C=0	10		V
Collector Base Cut off Current	I_{CBO}	V_{CB}=30V, I_E=0		100	nA
Emitter Base Cut Off Current	I_{EBO}	V_{EB}=10V, I_C=0		100	nA
DC Current Gain	h_{FE}	I_C=20mA, V_{CE}=2V	30000		
Collector Emitter Saturation Voltage	$V_{CE\ (sat)}$	I_C=100mA, I_B=0.1mA		1	V
Base Emitter Saturation Voltage	$V_{BE\ (sat)}$	I_C=100mA, I_B=5mA		1.5	V
Base Emitter On Voltage	$V_{BE\ (on)}$	I_C=10mA, V_{CE}=5V		1.4	V
Transition Frequency	f_T	V_{CE}=5V, I_C=10mA	125		MHz

BC516 Rev_0_050913E

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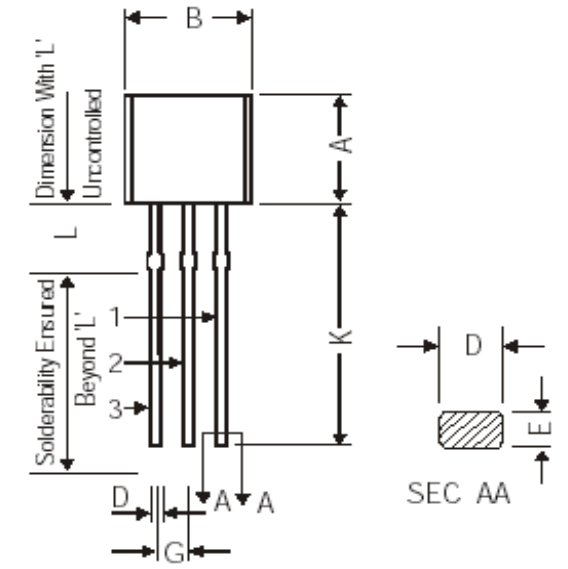
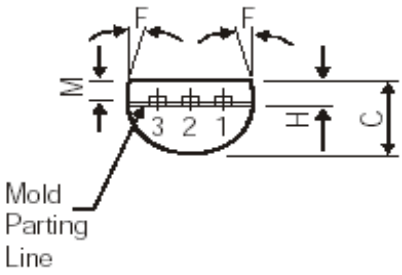
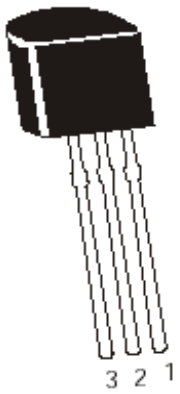


DIM	MIN.	MAX.
A	4.32	5.33
B	4.45	5.20
C	3.18	4.19
D	0.41	0.55
E	0.35	0.50
F	5 DEG	
G	1.14	1.40
H	1.20	1.40
K	12.70	—
L	1.982	2.082
M	1.03	1.20

All dimensions are in mm





PIN CONFIGURATION
1. EMITTER
2. BASE
3. COLLECTOR

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Disclaimer

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