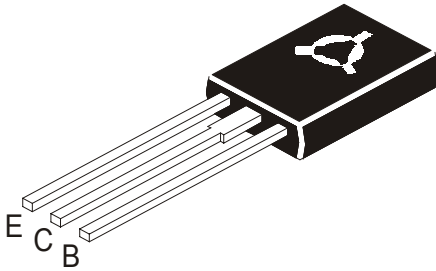


NPN EPITAXIAL SILICON POWER TRANSISTOR

BD410



**TO-126
Plastic Package**

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	V_{CBO}	500	V
Collector -Emitter Voltage	V_{CEO}	325	V
Emitter Base Voltage	V_{EBO}	5.0	V
Continuous Collector Current	I_C	1.0	A
Peak Collector Current	I_{CM}	1.5	
Total Power Dissipation @ $T_a=25\text{ }^\circ\text{C}$ @ $T_c=25\text{ }^\circ\text{C}$	P_{tot}	1.25 20	W
Storage Temperature Range	T_j, T_{stg}	- 55 to +125	$^\circ\text{C}$
Lead Temperature 1.6mm from Case for 10 Seconds.	T_L	260	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Cut off Current	I_{CES}	$V_{CE}=300\text{V}, I_B=0$			100	μA
Collector -Base Voltage	V_{CBO}	$I_C=500\mu\text{A}, I_E=0$	500			V
Collector Emitter Voltage	V_{CEO}^*	$I_C=10\text{mA}, I_B=0$	325			V
Emitter Base Voltage	V_{EBO}	$I_E=50\mu\text{A}, I_C=0$	5			V
DC Current Gain	h_{FE}	$I_C=5\text{mA}, V_{CE}=10\text{V}$ $I_C=50\text{mA}, V_{CE}=10\text{V}$ $I_C=100\text{mA}, V_{CE}=10\text{V}$	25 30 20		240	
Base Emitter Saturation Voltage	$V_{BE(Sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$			1.5	V
Collector Emitter Saturation Voltage	$V_{CE(Sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$			0.5	V

Dynamic Characteristics

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Output Capacitance	C_{obo}	$I_E=0, V_{CB}=10\text{V}, f=1\text{MHz}$		5.5		pF
Input Capacitance	C_{ibo}	$I_E=0, V_{EB}=0.5\text{V}, f=1\text{MHz}$		90		pF

*Pulsed Test $t_p=300\mu\text{s}, \text{Duty Cycle}\leq 2\%$

Disclaimer

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