# UTC UNISONIC TECHNOLOGIES CO., LTD

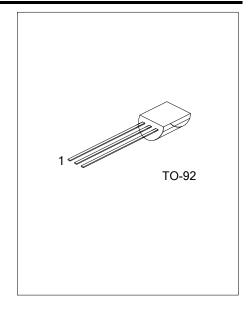
## BF422

#### NPN EPITAXIAL SILICON TRANSISTOR

### **HIGH VOLTAGE TRANSISTOR**

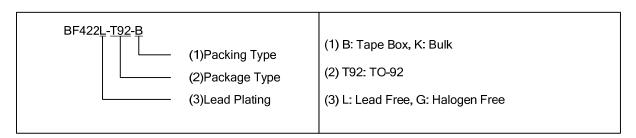
#### **FEATURES**

- \* Collector-Emitter Voltage: V<sub>CEO</sub>=250V.
- \* Complementary to UTC BF423.



#### **ORDERING INFORMATION**

Ordering Number		Dookogo	Pin Assignment			Dooking	
Lead Free	Halogen Free	Package	1	2	3	Packing	
BF422L-T92-B	BF422G-T92-B	TO-92	Е	С	В	Tape Box	
BF422L-T92-K	BF422G-T92-K	TO-92	Е	С	В	Bulk	



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#### ■ ABSOLUTE MAXIMUM RATING (T<sub>A</sub>=25°C)

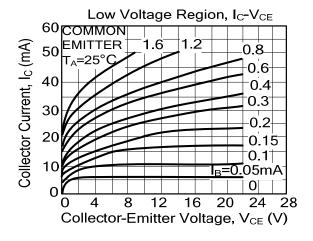
PARAMETER	SYMBOL	RATINGS	UNIT	
Collector-Base Voltage	V <sub>CBO</sub>	250	٧	
Collector-Emitter Voltage	V <sub>CEO</sub>	250	V	
Emitter-base voltage	V <sub>EBO</sub>	5	V	
Collector current (DC)	Ic	50	mA	
collector current (Peak)	I <sub>CP</sub>	100	mA	
base current	I <sub>B</sub>	50	mA	
Collector Power dissipation	Pc	625	mW	
Junction Temperature	TJ	150	°C	
Storage Temperature	T <sub>STG</sub>	-40 ~ <b>+</b> 150	°C	

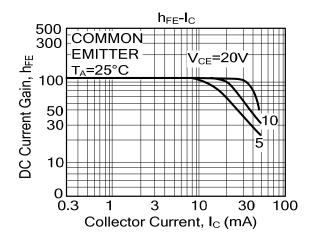
- Note: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.
  - 2. The device is guaranteed to meet performance specification within 0°C ~70°C operating temperature range and assured by design from –20°C ~85°C.

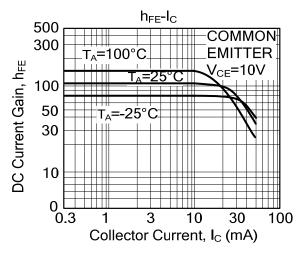
#### ■ **ELECTRICAL CHARACTERISTICS** (T<sub>A</sub>=25°C, unless otherwise specified)

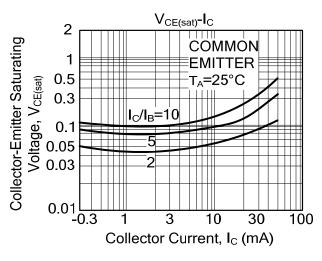
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I <sub>CBO</sub>	V <sub>CB</sub> = 200V, I <sub>E</sub> =0			10	nΑ
Emitter Cut-Off Current	I <sub>EBO</sub>	V <sub>EB</sub> = 5V, I <sub>C</sub> =0			50	nA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =20V, I <sub>C</sub> =25mA	50			
Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	$I_C=30$ mA, $I_B=5$ mA			0.6	V
Base-Emitter Voltage	$V_{BE}$	V <sub>CE</sub> =-20V, I <sub>C</sub> =25mA		0.75		V
Transition frequency	f⊤	V <sub>CE</sub> = 10V , I <sub>C</sub> = 10mA	60			MHz
Reverse Transfer Capacitance	Cre	V <sub>CB</sub> = 30V, I <sub>E</sub> =0, f=1MHz			1.6	pF

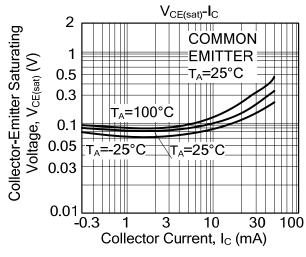
#### **■ TYPICAL CHARACTERISTICS**

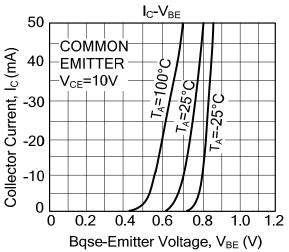




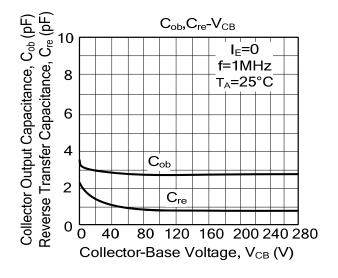


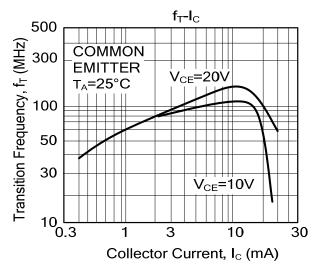


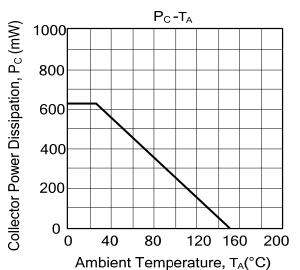


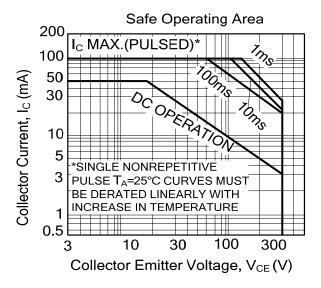


#### **■ TYPICAL CHARACTERISTICS(Cont.)**









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