



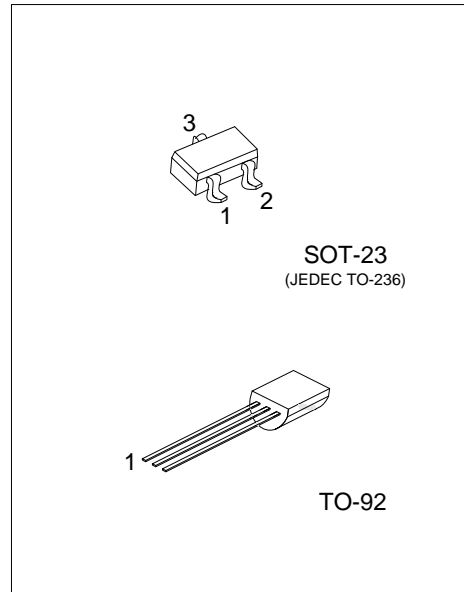
BF422

NPNEPITAXIAL SILICON TRANSISTOR

HIGH VOLTAGE TRANSISTOR

■ FEATURES

- * Collector-Emitter Voltage: $V_{CEO}=250V$.
- * Complementary to UTC BF423.



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
BF422L-AE3-R	BF422G-AE3-R	SOT-23	B	E	C	Tape Reel
BF422L-T92-B	BF422G-T92-B	TO-92	E	C	B	Tape Box
BF422L-T92-K	BF422G-T92-K	TO-92	E	C	B	Bulk

Note: Pin Assignment: B: Base C: Collector E: Emitter

<p>BF422G-AE3-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) R: Tape Reel, B: Tape Box, K: Bulk (2) AE3: SOT-23, T92: TO-92 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING

SOT-23	TO-92
<p>L: Lead Free G: Halogen Free</p>	<p>UTC BF422 L: Lead Free G: Halogen Free Date Code</p>

■ **ABSOLUTE MAXIMUM RATING** ($T_A=25^\circ\text{C}$, unless otherwise specified)

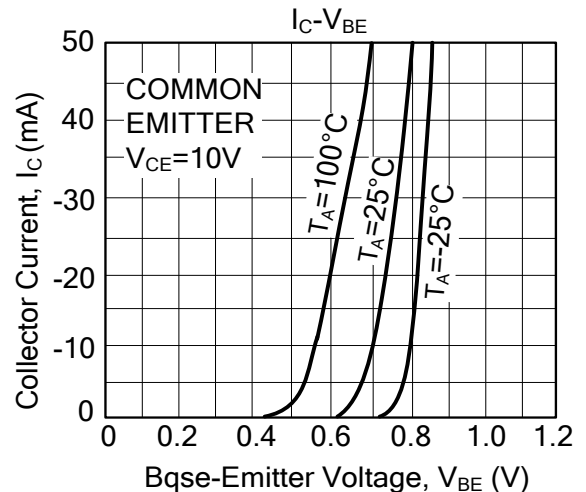
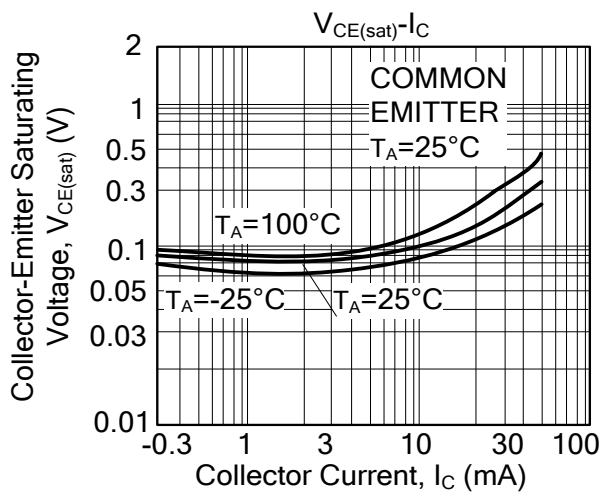
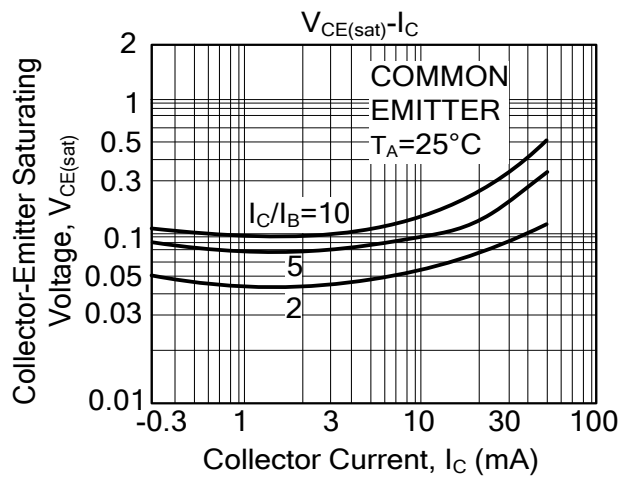
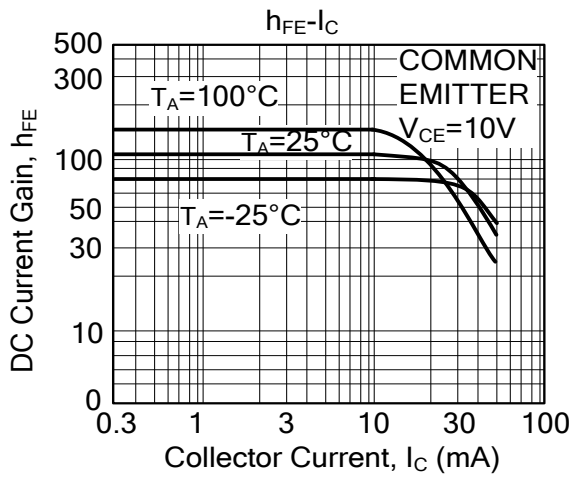
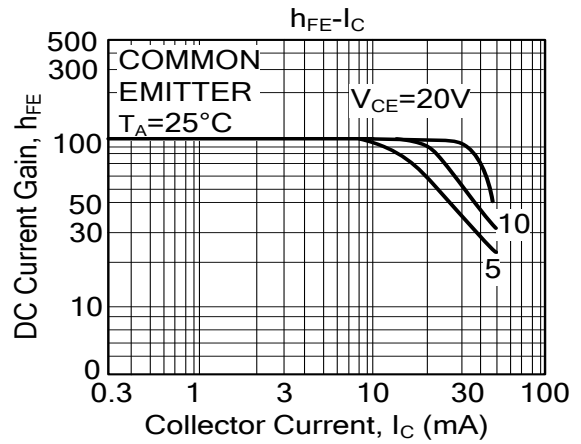
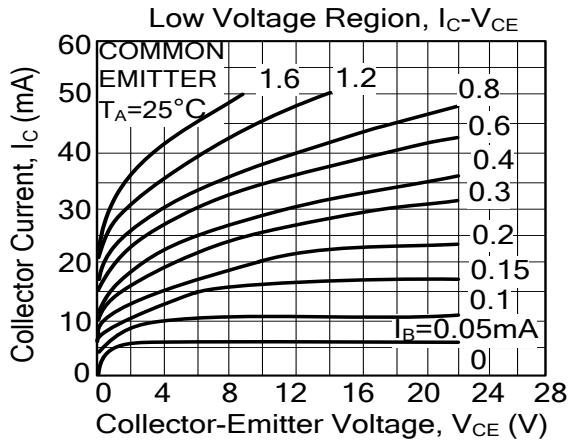
PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	250	V
Collector-Emitter Voltage	V_{CEO}	250	V
Emitter-base voltage	V_{EBO}	5	V
Collector current (DC)	I_C	50	mA
collector current (Peak)	I_{CP}	100	mA
base current	I_B	50	mA
Collector Power dissipation	SOT-23	350	mW
	TO-92	625	mW
Junction Temperature	T_J	+150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 ~ +150	$^\circ\text{C}$

- Notes: 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 .

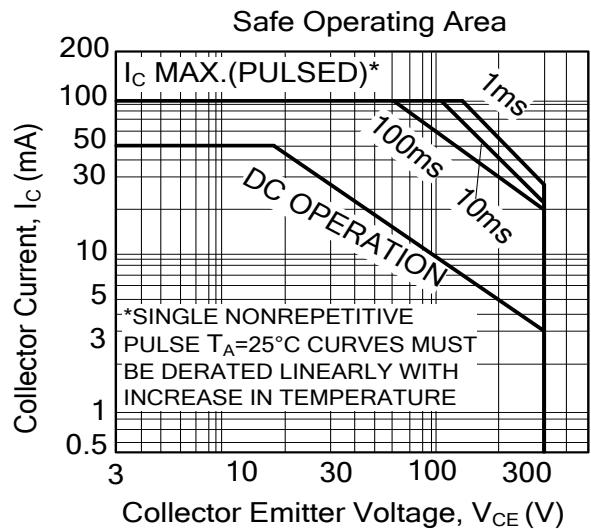
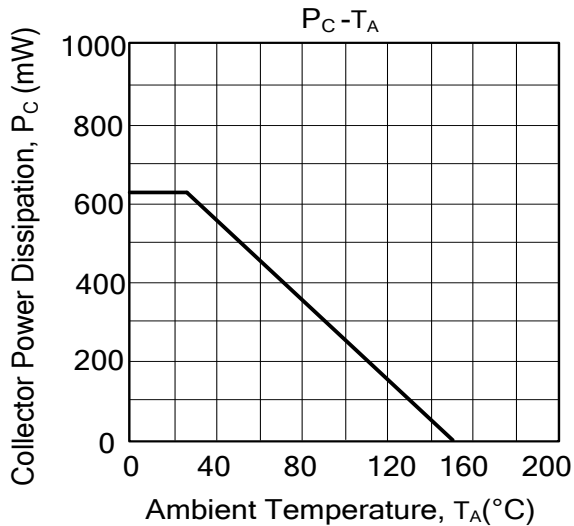
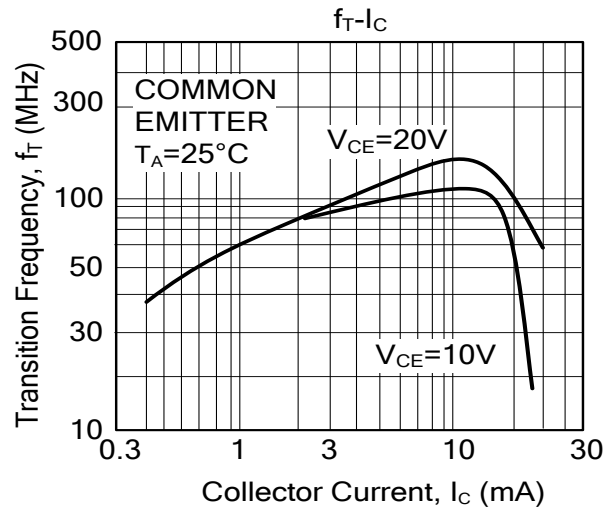
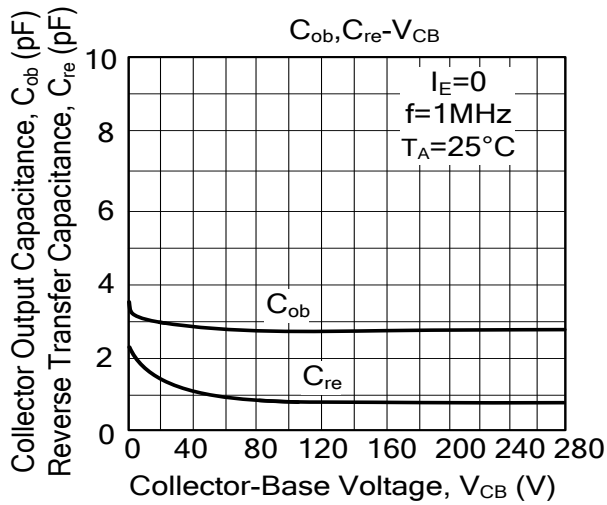
■ **ELECTRICAL CHARACTERISTICS** ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I_{CBO}	$V_{CB}=200\text{V}, I_E=0$			10	nA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			50	nA
DC current gain	h_{FE}	$V_{CE}=20\text{V}, I_C=25\text{mA}$	50			
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=30\text{mA}, I_B=5\text{mA}$			0.6	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=-20\text{V}, I_C=25\text{mA}$		0.75		V
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C=10\text{mA}$	60			MHz
Reverse Transfer Capacitance	C_{re}	$V_{CB}=30\text{V}, I_E=0, f=1\text{MHz}$			1.6	pF

■ **TYPICAL CHARACTERISTICS**



■ TYPICAL CHARACTERISTICS (Cont.)



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