



BFG198

Preliminary

NPN EPITAXIAL SILICON TRANSISTOR

NPN 8GHz WIDEBAND TRANSISTOR

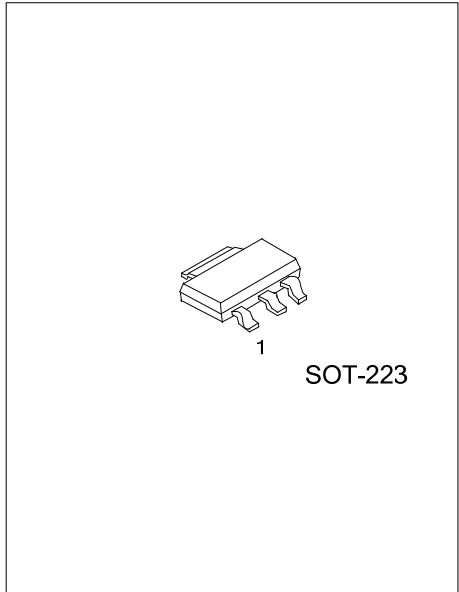
DESCRIPTION

UTC **BFG918** is NPN planar epitaxial transistor in a plastic, intended for wideband amplifier applications.

The device features a high gain and excellent output voltage capabilities.

FEATURES

- * High current gain
- * High current capability



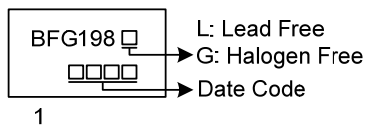
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
BFG198L-AA3-R	BFG198G-AA3-R	SOT-223	B	C	E	Tape Reel

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

<p>BFG198G-AA3-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) R: Tape Reel (2) AA3:SOT-223 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	BV_{CBO}	20	V
Collector-Emitter Voltage	BV_{CEO}	10	V
Emitter-Base Voltage	BV_{EBO}	2.5	V
Collector Current	I_C	100	mA
Power Dissipation	P_D	1	W
Junction Temperature	T_J	+150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 ~ +150	$^\circ\text{C}$

Note: 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.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I_{CBO}	$V_{CB}=5\text{V}, I_E=0$			100	nA
Collector-Emitter Cut-Off Current	I_{CEO}	$V_{CE}=10\text{V}, I_B=0$			10	μA
Emitter-Base Cut-Off Current	I_{EBO}	$V_{EB}=2.5\text{V}, I_E=0$			1	μA
DC Current Gain	h_{FE}	$V_{CE}=5\text{V}, I_C=50\text{mA}$	40			
Collector Capacitance	C_c	$I_E=i_e=0, V_{CB}=8\text{V}, f=1\text{MHz}$		1.5		pF
Emitter Capacitance	C_e	$I_C=i_c=0, V_{EB}=0.5\text{V}, f=1\text{MHz}$		4		pF
Feedback Capacitance	C_{re}	$I_C=0, V_{EB}=8\text{V}, f=1\text{MHz}$		0.8		pF
Transition Frequency	f_T	$V_{CE}=8\text{V}, I_C=50\text{mA}, f=1.0\text{GHz}, T_A=25^\circ\text{C}$		8		GHz

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