



BFG198

Preliminary

NPN EPITAXIAL SILICON TRANSISTOR

NPN 8GHz WIDEBAND TRANSISTOR

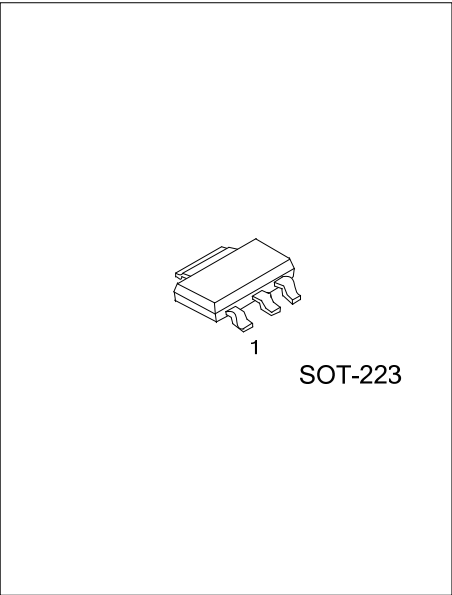
DESCRIPTION

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



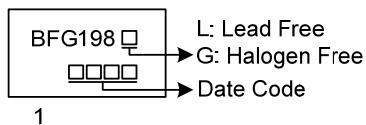
ORDERING INFORMATION

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>
---	---

MARKING



1



■ 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

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.