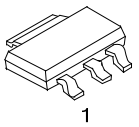
BFG198

Preliminary ***NPN EPITAXIAL SILICON TRANSISTOR***

NPN 8GHz WIDEBAND TRANSISTOR



SOT-223

■ 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

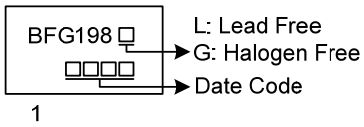
Note: Pin Assignment: B: Base C: Collector E: Emitter

BFG198G-AA3-R

(1) Packing Type
(2) Package Type
(3) Green Package

(1) R: Tape Reel
(2) AA3:SOT-223
(3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°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	°C
Storage Temperature	T_{STG}	-65 ~ +150	°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°C, unless otherwise specified)

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