



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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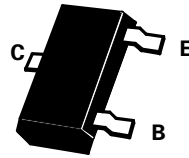


SOT23 NPN SILICON PLANAR RF TRANSISTORS

BFS17L BFS17H

ISSUE 4 – MARCH 2001

PARTMARKING DETAILS — BFS17L - E1L
BFS17H - E1H



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	25	V
Collector-Emitter Voltage	V_{CEO}	15	V
Emitter-Base Voltage	V_{EBO}	2.5	V
Peak Pulse Current	I_{CM}	50	mA
Continuous Collector Current	I_C	25	mA
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	330	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^{\circ}C$

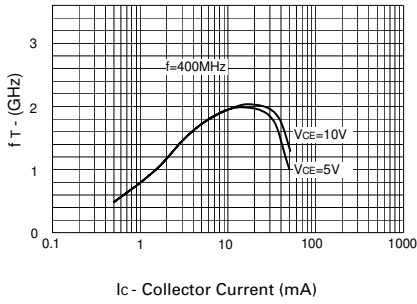
ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector Cut-Off Current	I_{CBO}			10 10	nA μA	$V_{CB}=10V, I_E=0$ $V_{CB}=10V, I_E=0,$ $T_{amb} = 100^{\circ}C$
Static Forward Current Transfer Ratio	h_{FE}					
BFS17L		25		100		$I_C=2.0mA, V_{CE}=1.0V$
BFS17H		70		200		$I_C=2.0mA, V_{CE}=1.0V$
		20		125		$I_C=25mA, V_{CE}=1.0V$
Transition Frequency	f_T		1.0 1.3		GHz GHz	$I_C=2.0mA, V_{CE}=5.0V$ $f=500MHz$ $I_C=25mA, V_{CE}=5.0V$ $f=500MHz$
Feedback Capacitance	$-C_{re}$		0.85		pF	$I_C=2.0mA, V_{CE}=5V, f=1MHz$
Output Capacitance	C_{obo}			1.5	pF	$V_{CB}=10V, f=1MHz$
Input Capacitance	C_{ibo}			2.0	pF	$V_{EB}=0.5V, f=1MHz$
Noise Figure	N		4.5		dB	$I_C=2.0mA, V_{CE}=5.0V$ $R_S=50\Omega, f=500MHz$
Intermodulation Distortion	d_{im}		-45		dB	$I_C=10mA, V_{CE}=6.0V$ $R_L=37.5\Omega, T_{amb}=25^{\circ}C$ $V_o=100mV$ at $f_p=183MHz$ $V_o=100mV$ at $f_q=200MHz$ measured at $f_{(2q-p)}=217MHz$

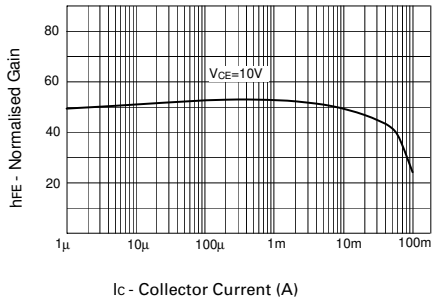
Spice parameter data is available upon request for this device

BFS17L BFS17H

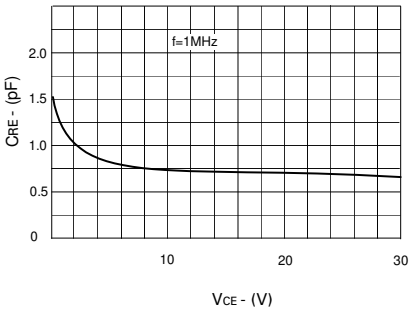
TYPICAL CHARACTERISTICS



f_T v I_C



hFE v I_C



CRE v V_{CE}