

# DISCRETE SEMICONDUCTORS

## Wideband transistors

# RF & MICROWAVE

## SEMICONDUCTORS & MODULES

### SECOND-GENERATION WIDEBAND TRANSISTORS ( $f_T$ up to 6 GHz) *continued*

type number	polarity	ratings			typical characteristics						package
		$V_{CE0}$ (V)	$I_C$ (mA)	$P_{tot}$ (mW)	$f_T$ (GHz)	linear <sup>1)</sup> $V_{out}$ (mV)	F (dB)	@ f (MHz)	$G_{UM}$ (dB)	@ f (MHz)	
<b>BFQ63</b>	npn	15	75	250	5	500	2.3	500	11.5	500	TO-72
<b>BFQ68</b>	npn	18	300	4500	4	1600	–	–	13	800	SOT122A
<b>BFQ136</b>	npn	18	600	9000	4	2500	–	–	12.5	800	SOT122A
<b>BFQ149</b>	pnp	15	100	1000	5	–	3.75	500	12	500	SOT89
<b>BFR92</b>	npn	15	25	300	5	150	2.4	500	18	800	SOT23
<b>BFR92A</b>	npn	15	25	300	5	150	2.1	1000	14	1000	SOT23
<b>BFR92AW</b>	npn	15	25	300	5	–	2.0	1000	14	1000	SOT323
<b>BFR93</b>	npn	12	35	300	5	425	1.9	500	16.5	500	SOT23
<b>BFR93A</b>	npn	12	35	300	6	425	1.9	1000	13	1000	SOT23
<b>BFR93AW</b>	npn	12	35	300	6	–	1.5	1000	13	1000	SOT323
<b>BFR106</b>	npn	15	100	500	5	350	3.5	800	11.5	800	SOT23
<b>BFT92</b>	pnp	15	25	300	5	150	2.5	500	18	500	SOT23
<b>BFT92W</b>	pnp	15	35	300	5	–	2.5	500	17	500	SOT323
<b>BFT93</b>	pnp	12	35	300	5	300	2.4	500	16.5	500	SOT23
<b>BFT93W</b>	pnp	12	50	300	5	–	2.4	500	15.5	500	SOT323

<sup>1)</sup> at a  $d_{im}$  of –60 dB, measured according to DIN45004B par. 6.3: 3-tone test

### SECOND-GENERATION NPN WIDEBAND TRANSISTORS ( $f_T$ up to 7 GHz) *continued*

type number	ratings			typical characteristics								package
	$V_{CE0}$ (V)	$I_C$ (mA)	$P_{tot}$ (mW)	$f_T$ (GHz)	F (dB)	$G_{UM}$ (dB)	@ f (MHz)	F (dB)	$G_{UM}$ (dB)	@ f (MHz)		
<b>BFG92AW</b>	15	25	500	6	2.1	15.5	1000	3	10	2000	SOT343	
<b>BFG92AW/X</b>	15	25	500	6	2.1	15.5	1000	3	10	2000	SOT343	
<b>BFG92AW/XR</b>	15	25	500	6	2.1	15.5	1000	3	10	2000	SOT343R	
<b>BFG93AW</b>	12	35	500	7	2	14.5	1000	3	9	2000	SOT343	
<b>BFG93AW/X</b>	12	35	500	7	2	14.5	1000	3	9	2000	SOT343	
<b>BFG93AW/XR</b>	12	35	500	7	2	14.5	1000	3	9	2000	SOT343R	