

RF & MICROWAVE SEMICONDUCTORS & MODULES

DISCRETE SEMICONDUCTORS Wideband transistors

THIRD-GENERATION NPN WIDEBAND TRANSISTORS (f_T up to 8 GHz)

	package						
	ceramic						
f_T/I_C curve see chart	SOT172	SOT173	SOT23	SOT143	SOT223	SOT323	SOT343
(14)		BFQ66	BFQ67	BFG67(X)/(XR)		BFQ67W	BFG67W(X)/(XR)
(15)				BFG197(X)/(XR)	BFG198		BFG197W(X)/(XR)
(16)	BFQ135				BFG135		
(17)	BFQ270						

THIRD-GENERATION NPN WIDEBAND TRANSISTORS (f_T up to 8 GHz) *continued*

type number	ratings			typical characteristics						package
	V_{CE0} (V)	I_C (mA)	P_{tot} (mW)	f_T (GHz)	F @ 2 GHz (dB)	G_{UM} (dB)	V_{CE} (V)	I_C (mA)		
BFG67	10	50	380	8	2.2	10.9	8	15	SOT143	
BFG67/X	10	50	380	8	2.2	10.9	8	15	SOT143	
BFG67/XR	10	50	380	8	2.2	10.9	8	15	SOT143	
BFG135	15	150	1000	7	–	12. ¹⁾	10	100	SOT223	
BFG197	10	100	350	7.5	1.4 ¹⁾	10	6	50	SOT143	
BFG197/X	10	100	350	7.5	1.4 ¹⁾	10	6	50	SOT143	
BFG197/XR	10	100	350	7.5	1.4 ¹⁾	10	6	50	SOT143	
BFG198	10	100	1000	8	–	15. ¹⁾	8	50	SOT223	
BFQ66	10	50	350	8	2.7	11.5	8	15	SOT173	
BFQ67	10	50	300	8	2.2	8	8	15	SOT23	
BFQ67W	10	50	300	8	2.7	8	8	15	SOT323	
BFQ135	19	150	2700	6.5	–	13.5 ¹⁾	18	120	SOT172	
BFQ270	19	500	10000	6	–	10	18	240	SOT172	

¹⁾ at 800 MHz

THIRD-GENERATION NPN WIDEBAND TRANSISTORS (f_T up to 8 GHz) *continued*

type number	ratings			typical characteristics							
	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)	package
BFG67W	10	50	500	7.5	1.7	15.5	1000	2.2	10	2000	SOT343
BFG67W/X	10	50	500	7.5	1.7	15.5	1000	2.2	10	2000	SOT343
BFG67W/XR	10	50	500	7.5	1.7	15.5	1000	2.2	10	2000	SOT343R
BFG197W	10	100	500	7.5	2.4	14	1000	3.5	9	2000	SOT343
BFG197W/X	10	100	500	7.5	2.4	14	1000	3.5	9	2000	SOT343
BFG197W/XR	10	100	500	7.5	2.4	14	1000	3.5	9	2000	SOT343R