

BeRex Cross Reference Guide

株式会社ネットウエル

Product Description	Company	BeRex	W.J			Hittite	Avago			
	Part Number	BT013	AH102	AH115	AH125	HMC 454	MGA-30116	MGA-30216	MGA-30316	
	Category	HIGH OIP3	Linearity amp	Linearity amp	Linearity amp	Medium Power	Linearity Smart FE	Linearity Smart FE	Linearity Smart FE	
	Material	InGap/GaAs HBT	InGap HBT	InGap HBT	InGap HBT	InGap HBT	GaAs E-pHEMT	GaAs E-pHEMT	GaAs E-pHEMT	
	Data sheet version	Finished	Finished	Finished	Finished	Finished	PRELIMINARY	PRELIMINARY	PRELIMINARY	
	Package	SOT89	SOT89	SOIC8	SOT89	SOT89	LPCC 3X3	LPCC 3X3	LPCC 3X3	
	Matching Circuit	External Matching	External Matching	External Matching	External Matching	External Matching	External Matching	External Matching	External Matching	
Typical Performance	Vcc(V)	5	9	5	5	5	5	5	5	
	Icc(mA)	135	200	250	150	150	200	205	213	
	ESD	Class 1	Class 1C	Class 1B	Class 2	?	Class A	Class A	Class A	
	MSL	MSL1	MSL3	MSL3	MSL3	MSL1	MSL1	MSL1	MSL1	
	Gain	70MHz								
		900MHz		13.9		20	17.8	16.7		
		1900MHz	15	13.6	14.3	17.1	12.5			
		2140MHz	14	13.5	14.4	16.4	12.5		14.2(@2GHz)	
		2450MHz	13							12.8(@3.5GHz)
	P1	70MHz								
		900MHz		27		28.7	24.5	27.7		
		1900MHz	27.5	27	28.3	28.2	27			
		2140MHz	27.2	27	28.5	28.1			29.1(@2GHz)	
		2450MHz	27				27.5			28.4(@3.5GHz)
	OIP3(dBm)	70MHz								
		900MHz		46		45	40	44.9		
		1900MHz	45	45	44	44	41			
		2140MHz	45	44	42	44.3	42		45.6(@2GHz)	
		2450MHz	43							44.6(@3.5GHz)
	S11	70MHz								
900MHz			-25		20	-9.0	-10.0			
1900MHz		-17.5	-16	-12	15	-7.0				
2140MHz		-10.5	-18	-23	17	-12		-15(@2GHz)		
2450MHz		-13.0							-10(@3.5GHz)	
S22	70MHz									
	900MHz		-24		9.9	-13	-10.0			
	1900MHz	-12.5	-18	-8	10	-21				
	2140MHz	-10.5	-16	-8	9.6	-19		-25(@2GHz)		
	2450MHz	-13.0							-8.5(@3.5GHz)	
NF(dB)	70MHz									
	900MHz		3.1			8	2.7			
	1900MHz	6.3	3.6	5		6.5				
	2140MHz	6.3	3.6	5.3		5.2		2.8(@2GHz)		
	2450MHz	6.2							2.7(@3.5GHz)	

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	Company	BeRex	Sirenza		Prewell					
	Part Number	BT013	SXA-389	SXB-2089	PH430	PH435	PH465	PH480	PH485	
Product Description	Category	HIGH OIP3	Medium Power	Medium Power	Linearity amp	Linearity amp	Linearity amp	Linearity amp	Linearity amp	
	Material	InGap/GaAs HBT	GaAs HBT	InGap/GaAs HBT	InGap HBT	InGap HBT	InGap HBT	InGap HBT	InGap HBT	
	Data sheet version	Finished	Finished	Finished	Finished	Finished	Finished	Finished	Finished	
	Package	SOT89	SOT89	SOT89	SOT89	SOT89	SOT89	SOT89	SOT89	
	Matching Circuit	External Matching	External Matching	External Matching	External Matching	External Matching	External Matching	External Matching	External Matching	
Typical Performance	Vcc(V)	5	5	5.2	5	5	5	5	5.5	
	Icc(mA)	135	105	135	155	152	148	130	162	
	ESD	Class 1	Class 1B	Class 2	Class 1C	Class 1C	Class 1C	Class 1C	Class 1C	
	MSL	MSL1		MSL1	MSL3	MSL3	MSL3	MSL3	MSL3	
	Gain	70MHz								
		900MHz		18.4	23			19		21.6
		1900MHz	15	13.6	17	17.5	16.8	15	15.2	15.3
		2140MHz	14	13.5	17	16.8		13.3	14.6	14.8
		2450MHz	13	12.8						
	P1	70MHz								
		900MHz		25	24			25.5		25
		1900MHz	27.5	25	24.5	24.5	25.5	25.1	27	28
		2140MHz	27.2	25	24.5	25		25.2	27	28.5
		2450MHz	27	25						
	OIP3(dBm)	70MHz								
		900MHz		41	41			41.5		43
		1900MHz	45	43	43	42	42	41.5	44	44
		2140MHz	45	42	43	42		41	43	44
		2450MHz	43	41						
	S11	70MHz								
		900MHz		-20	-17			-13.0		-18.0
		1900MHz	-17.5	-18	-13	-13	-17	-12	-13	-14
		2140MHz	-10.5	-20	-18	-18.0		-11.0	-14.0	-20.0
		2450MHz	-13.0	-20						
	S22	70MHz								
		900MHz						-11.0		-15.0
		1900MHz	-12.5			-15	-17	-11	-12	-13
2140MHz		-10.5			-18.0		-14.0	-13.0	-15.0	
2450MHz		-13.0								
NF(dB)	70MHz									
	900MHz		4.5	4.5			3.8		3.3	
	1900MHz	6.3	4.8	4.7	3.1	3.1	3.2	3.3	3.6	
	2140MHz	6.3	5	4.2	3.1		3.3	3.3	3.6	
	2450MHz	6.2	5.7							