

BeRex BCP240T CROSS REFERENCE COMPARISON

MANUFACTURER		BeRex	EXCELICS	RFMD	RFMD	MwT
PART DESIGNATION		BCP240T	EPA240B	FPD3000	FPD2250	MwT-PH11
PROCESS		pHEMT	pHEMT	pHEMT	pHEMT	pHEMT
DIE SIZE	Length x Width x Thickness (μm)	950x410x100	960x350x75	830x470x75	680x470x75	775x343x100
GATE	Length x Width (μm)	0.25x2400	0.3x2400	0.25x3000	0.25x2250	0.3x2400
Vds	Drain-Source Voltage (V)	8	8	8	8	7
Idss	Sat. Drain Current @ Vds=3V, Vgs=0V (mA)	720	720	930*	700*	440-800**
Pin	Max. RF Input Power (dBm)	31	30	27.5	26.5	28.5**
P1dB	Output Power typical @12GHz , Ids= 50% Idss (dBm)	34.5	32.5	32.5	32	32**
	Output Power typical @18GHz Ids= 50% Idss (dBm)		32.5			32**
G1dB	Gain typical @ 12GHz Ids= 50% Idss (dB)	10	10.5	6.5	7.5	9**
	Gain typical @ 18GHz Ids= 50% Idss (dB)		8			
PAE	Power Added Efficiency @ 12GHz, Vds=3V, Vgs=0V (%)	55	44	30	45	50**
Gm	Typical Transconductance	960	760	800	600	800
TCH	Max. Junction Temperature ($^{\circ}\text{C}$)	175	175	175	175	175

* Manufacturer specified @ Vds=1.3V, Vgs=0V

** Manufacturer specified with Ids= 60% Idss