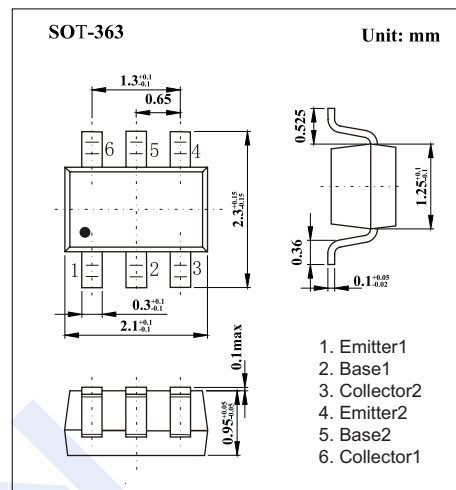
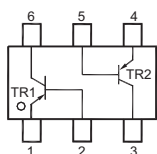


PNP Transistor

MMBT5401DW (KMBT5401DW)

■ Features

- Silicon epitaxial planar transistor
- For high voltage amplifier applications



■ Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	-160	V
Collector - Emitter Voltage	V _{CE0}	-150	
Emitter - Base Voltage	V _{EB0}	-5	
Collector Current	I _c	-600	mA
Power Dissipation	P _{tot}	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-55 to +150	

■ Electrical Characteristics (Ta = 25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _c = -100 μA, I _E = 0	-160			V
Collector- emitter breakdown voltage	V _{CE0}	I _c = -1.0 mA, I _B = 0	-150			
Emitter - base breakdown voltage	V _{EB0}	I _E = -10 μA, I _c = 0	-5			
Collector-base cut-off current	I _{CB0}	V _{CB} = -120V, I _E = 0			-50	nA
Emitter cut-off current	I _{EB0}	V _{EB} = -3V, I _c = 0			-50	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c = -10 mA, I _B = -1 mA I _c = -50 mA, I _B = -5 mA			-0.2 -0.5	V
Base - emitter voltage	V _{BE(sat)}	I _c = -10 mA, I _B = -1 mA I _c = -50 mA, I _B = -5 mA			-1 -1	
DC current gain	h _{FE}	I _c = -1 mA, V _{CE} = -5 V I _c = -10 mA, V _{CE} = -5 V I _c = -50 mA, V _{CE} = -5 V	50 60 50		240	MHz
Transition frequency	f _T	I _c = -10mA, V _{CE} = -10V, f = 100MHz	100		300	
Output Capacitance	C _{ob0}	V _{CB} = -10 V, f = 1 MHz			6	

PNP Transistor

MMBT5401DW (KMBT5401DW)

■ Typical Characteristics

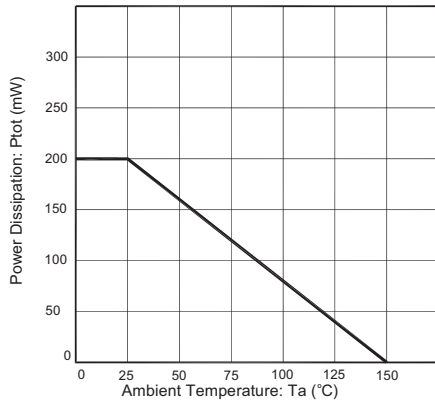


Fig.1 Max Power Dissipation vs Ambient Temperature

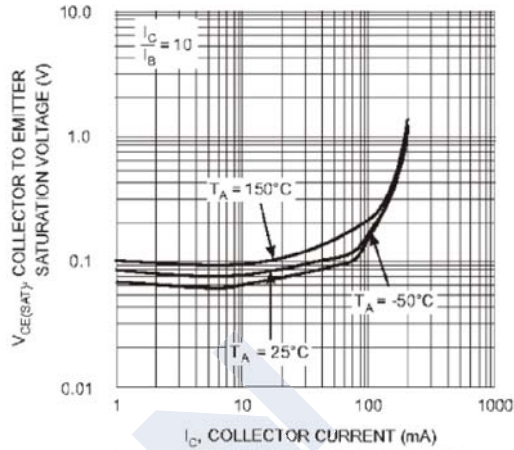


Fig. 2, Collector Emitter Saturation Voltage vs. Collector Current

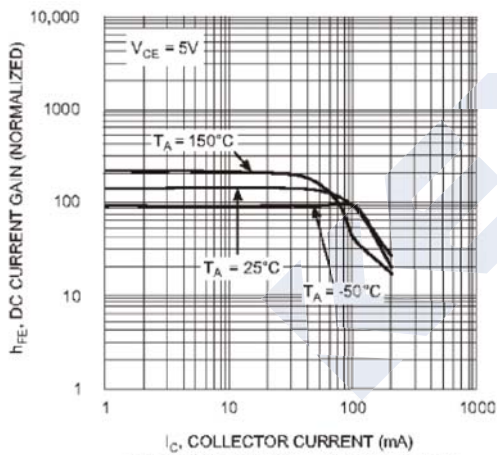


Fig. 3, DC Current Gain vs. Collector Current

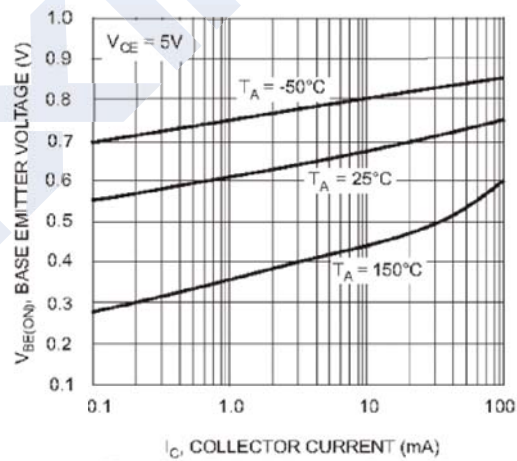


Fig. 4, Base Emitter Voltage vs. Collector Current

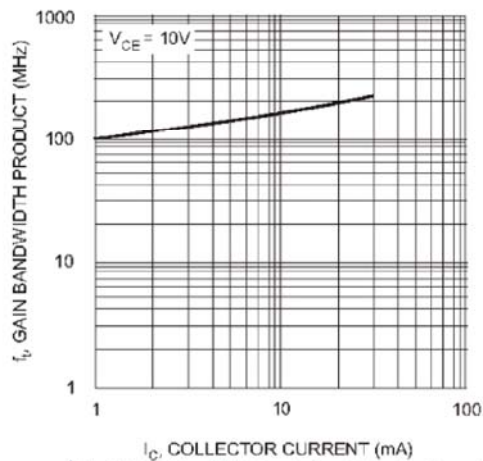


Fig. 5, Gain Bandwidth Product vs Collector Current