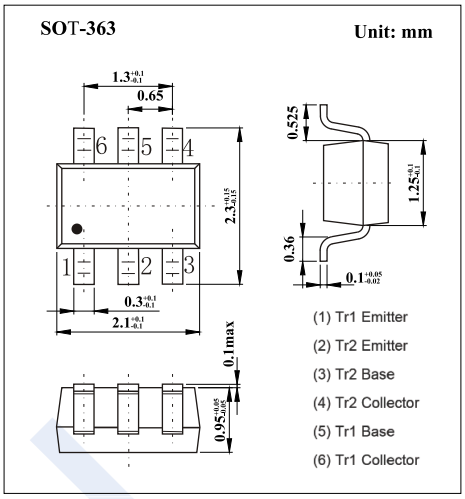
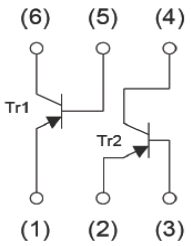
PNP Transistors

UMT2N



■ Features

- Collector Current Capability I_C=-150mA
- Collector Emitter Voltage V_{CEO}=-50V



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-60	V
Collector - Emitter Voltage	V_{CEO}	-50	
Emitter - Base Voltage	V_{EBO}	-6	
Collector Current - Continuous	I_C	-150	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	150	℃
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= -100 μA, I_E=0	-60			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -1 mA, I_B=0	-50			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 μ A, I_C=0	-6			
Collector-base cut-off current	I_{CBO}	V_{CB}= -60 V , I_E=0			-100	nA
Emitter cut-off current	I_{EBO}	V_{EB}= -6V , I_C=0			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-50 mA, I_B=-5mA			-0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=-50 mA, I_B=-5mA			-1.2	
DC current gain	h_{FE}	V_{CE}= -6V, I_C= -1mA	120		560	
Collector output capacitance	C_{ob}	V_{CB}= -12V, I_E= 0,f=1MHz			5	pF
Transition frequency	f_T	V_{CE}= -12V, I_C= -2mA,f=100MHz		140		MHz

■ Marking

Marking	T2

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■ Typical Characterisitics

<For Tr1 and Tr2 in common>

Fig.1 Ground Emitter Propagation Characteristics

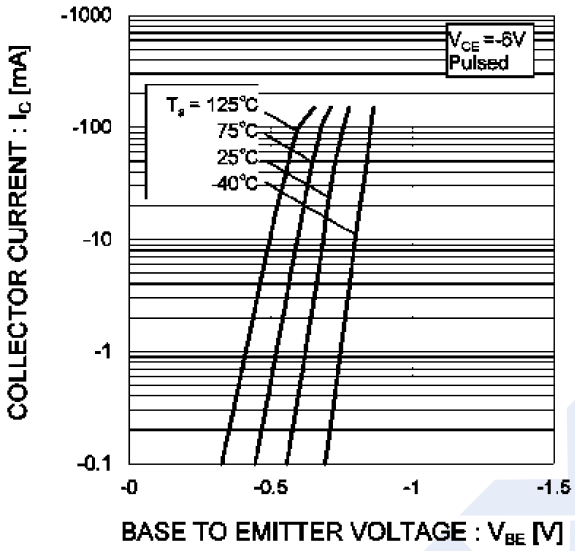


Fig.2 Grounded Emitter Output Characteristics

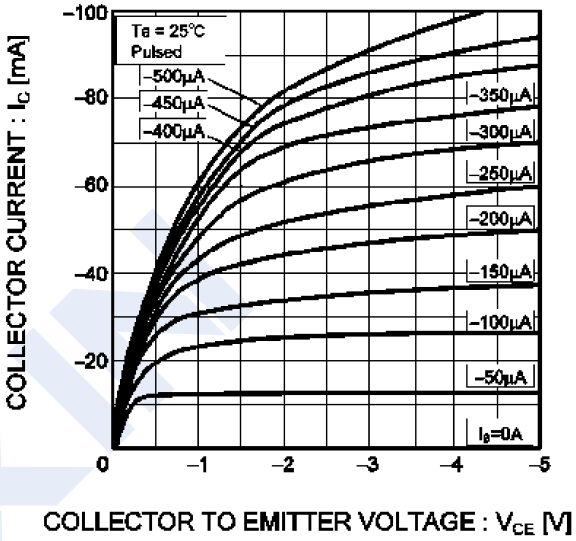


Fig.3 DC Current Gain vs. Collector Current (I)

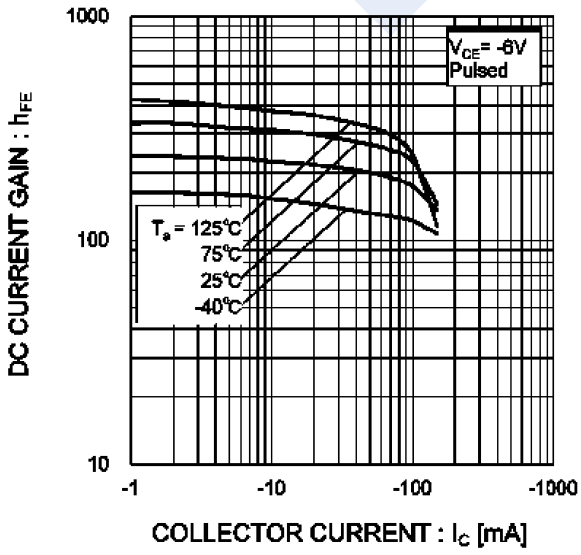
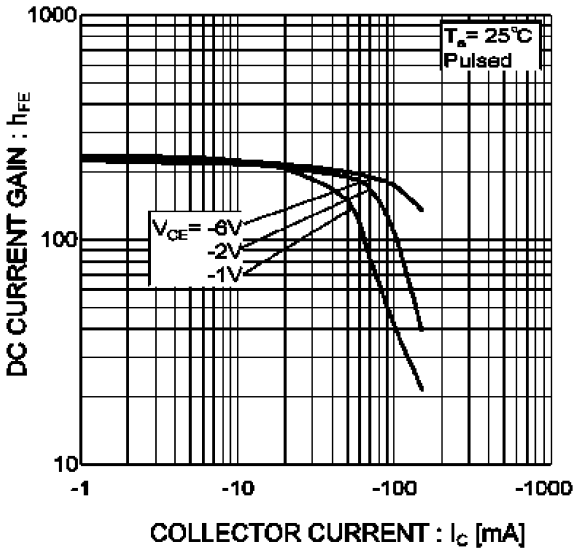


Fig.4 DC Current Gain vs. Collector Current (II)



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■ Typical Characterisitics

<For Tr1 and Tr2 in common>

Fig.5 Collector-Emitter Saturation Voltage vs. Collector Current(I)

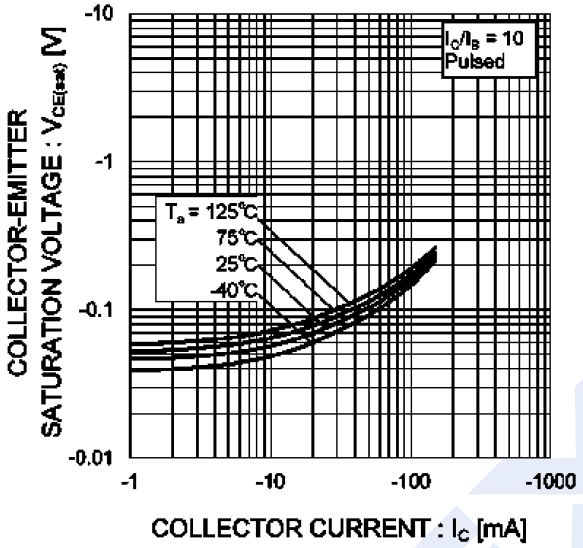


Fig.6 Collector-Emitter Saturation Voltage vs. Collector Current(II)

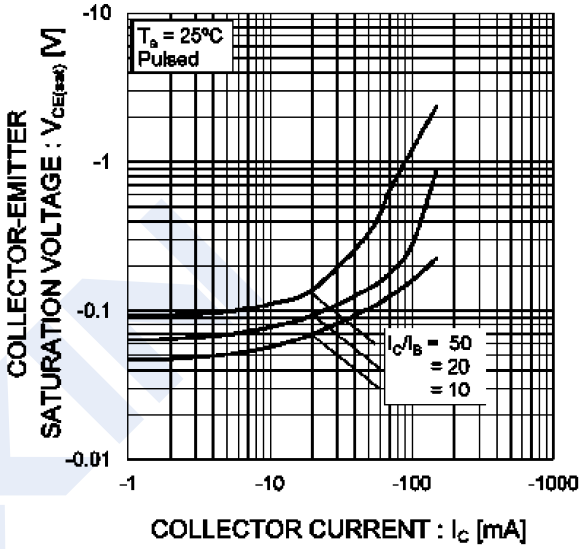


Fig.7 Base-Emitter Saturation Voltage vs. Collector Current (I)

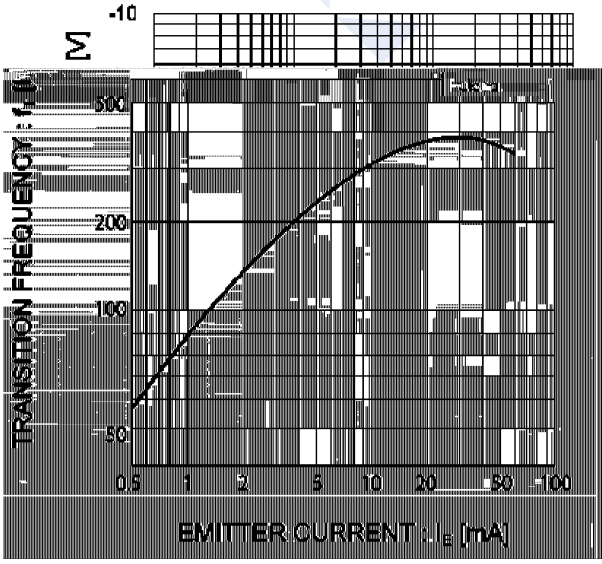
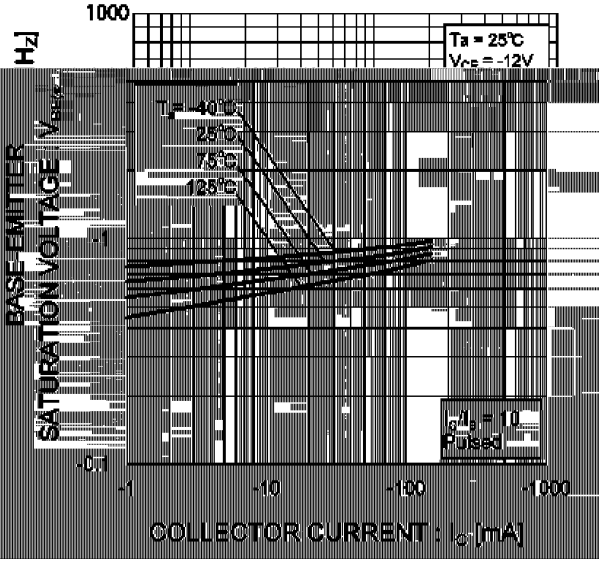


Fig.8 Gain Bandwith Product vs. Emitter Current



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■ Typical Characterisitics

<For Tr1 and Tr2 in common>

Fig.9 Collector Output Capacitance vs. Collector-Base Voltage Emitter Input Capacitance vs. Emitter-Base Voltage

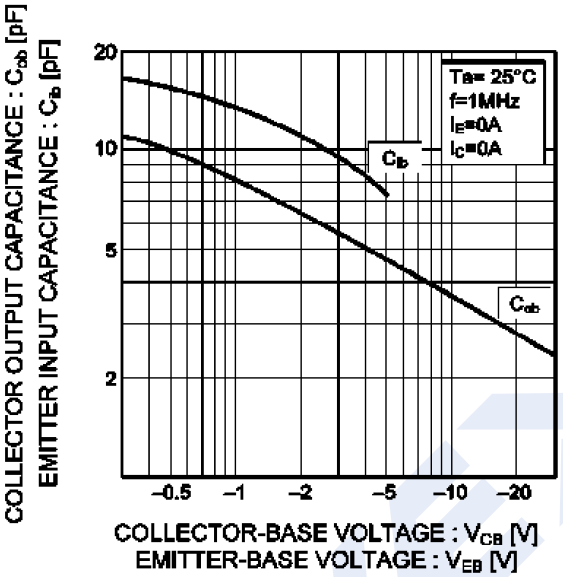

Fig.10 Safe Operating Area