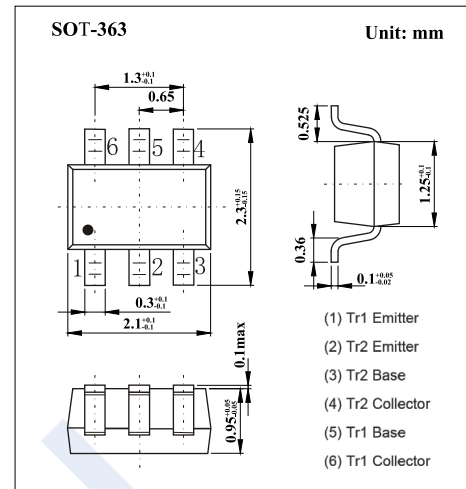
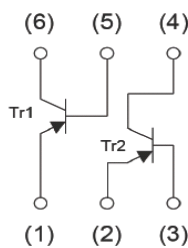


PNP Transistors

UMT2N

■ Features

- Collector Current Capability $I_C = -150\text{mA}$
- Collector Emitter Voltage $V_{CE0} = -50\text{V}$

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-60	V
Collector - Emitter Voltage	V_{CE0}	-50	
Emitter - Base Voltage	V_{EB0}	-6	
Collector Current - Continuous	I_C	-150	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = -100\ \mu\text{A}$, $I_E = 0$	-60			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1\ \text{mA}$, $I_B = 0$	-50			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100\ \mu\text{A}$, $I_C = 0$	-6			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -60\ \text{V}$, $I_E = 0$			-100	nA
Emitter cut-off current	I_{EB0}	$V_{EB} = -6\ \text{V}$, $I_C = 0$			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50\ \text{mA}$, $I_B = -5\ \text{mA}$			-0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -50\ \text{mA}$, $I_B = -5\ \text{mA}$			-1.2	
DC current gain	h_{FE}	$V_{CE} = -6\ \text{V}$, $I_C = -1\ \text{mA}$	120		560	
Collector output capacitance	C_{ob}	$V_{CB} = -12\ \text{V}$, $I_E = 0$, $f = 1\ \text{MHz}$			5	pF
Transition frequency	f_T	$V_{CE} = -12\ \text{V}$, $I_C = -2\ \text{mA}$, $f = 100\ \text{MHz}$		140		MHz

■ Marking

Marking	T2
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PNP Transistors

UMT2N

- Typical Characteristics
<For Tr1 and Tr2 in common>

Fig.1 Ground Emitter Propagation Characteristics

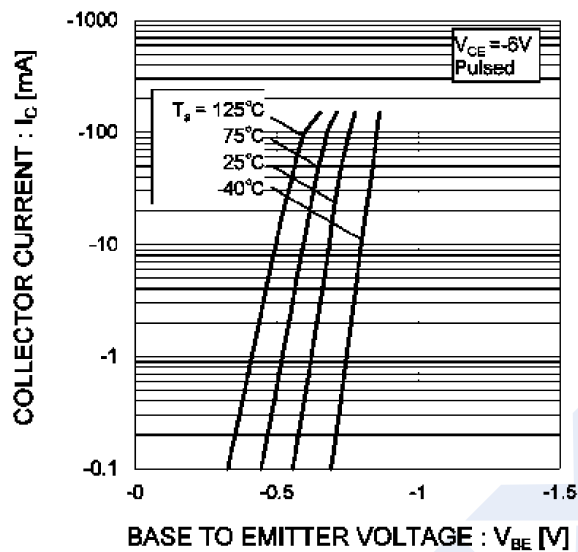


Fig.2 Grounded Emitter Output Characteristics

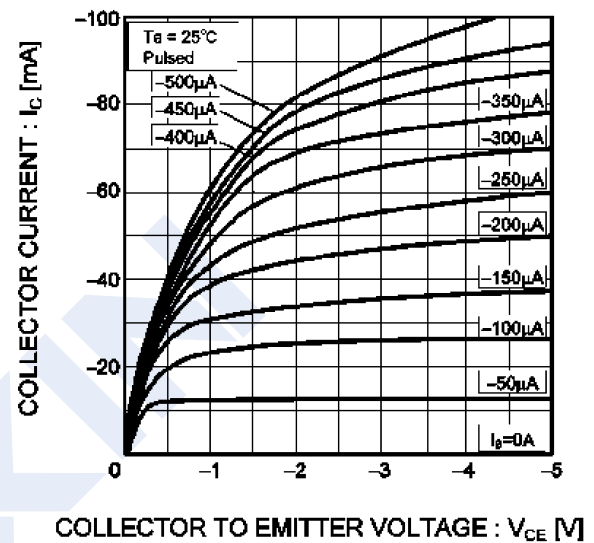


Fig.3 DC Current Gain vs. Collector Current (I)

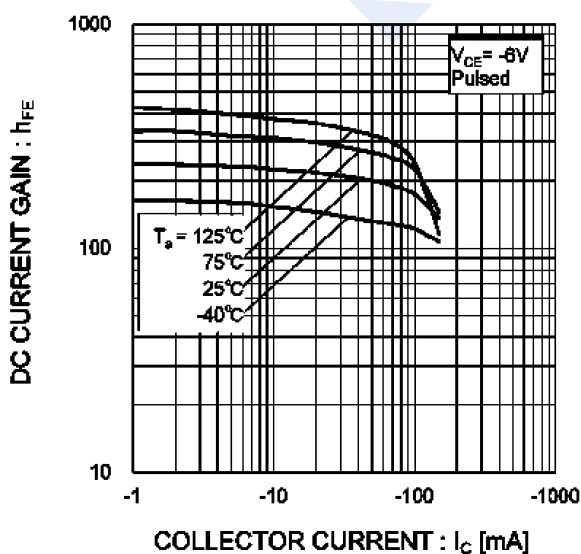
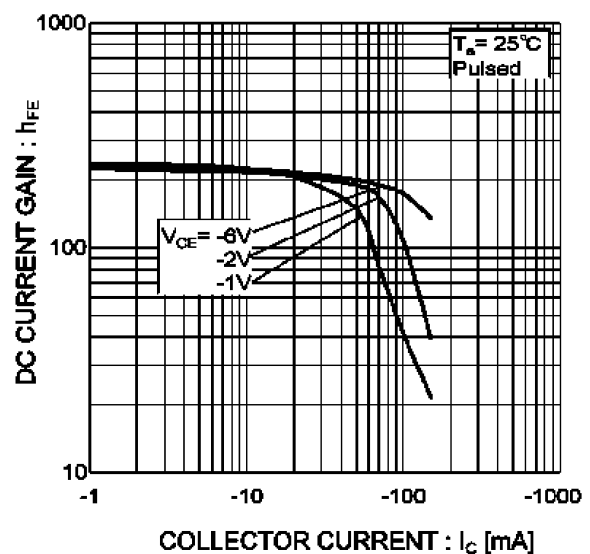


Fig.4 DC Current Gain vs. Collector Current (II)



PNP Transistors

UMT2N

■ Typical Characteristics

<For Tr1 and Tr2 in common>

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

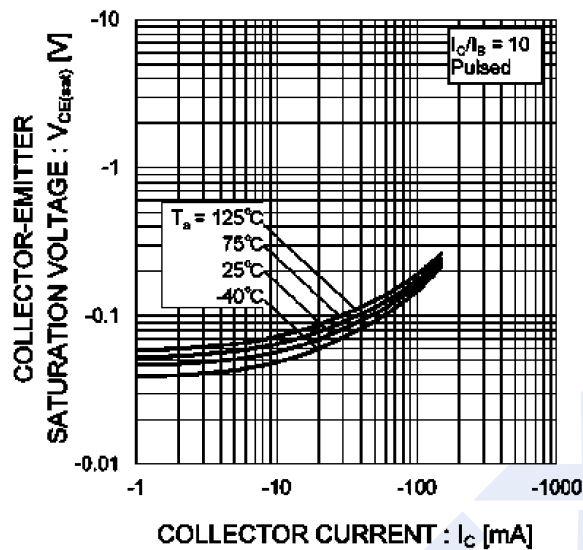


Fig.6 Collector-Emitter Saturation Voltage vs. Collector Current(II)

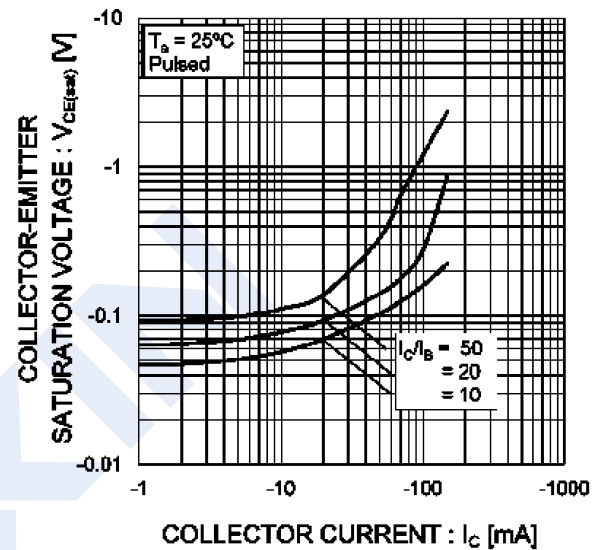


Fig.7 Base-Emitter Saturation Voltage vs. Collector Current (I)

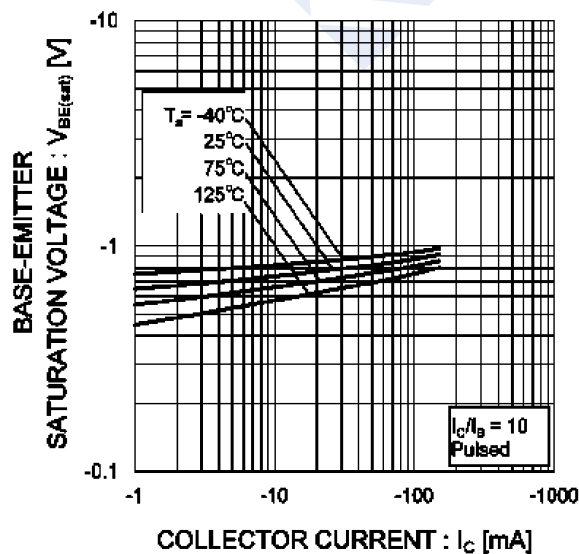
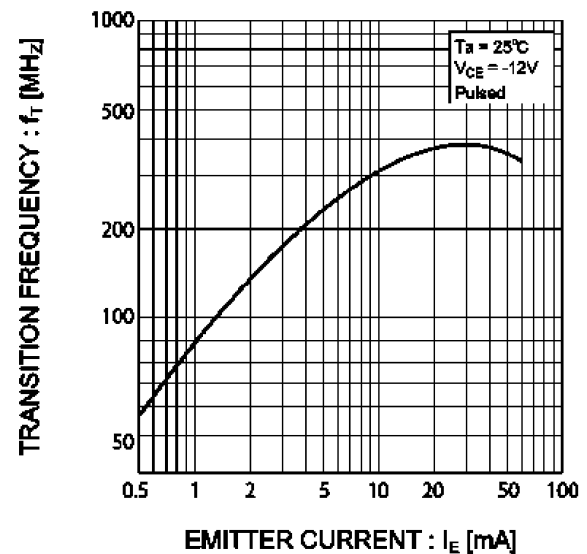


Fig.8 Gain Bandwidth Product vs. Emitter Current



PNP Transistors

UMT2N

■ Typical Characteristics

<For Tr1 and Tr2 in common>

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

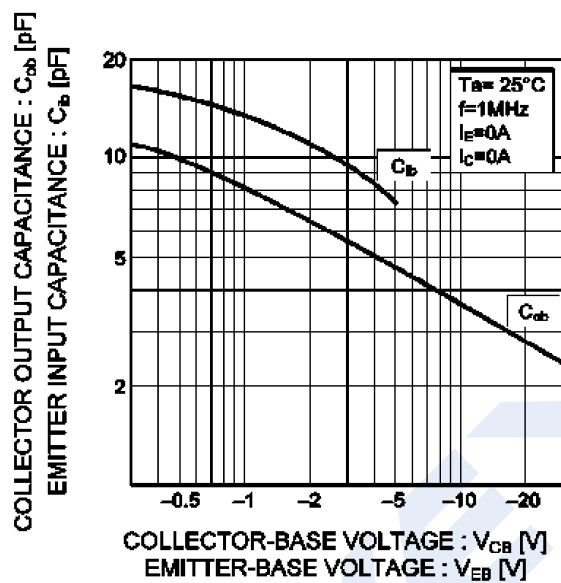


Fig.10 Safe Operating Area

