TAIGITON

MMDT5401DW

Plastic-Encapsulate Transistors

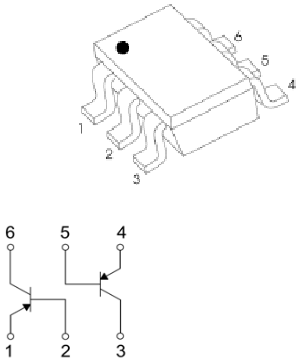
DUAL TRANSISTOR (PNP+PNP)

FEATURES

- Complementary to MMDT5551DW
- Small Surface Mount Package
- Ideal for Medium Power Amplificationand Switching

MARKING:2L

SOT-363



MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

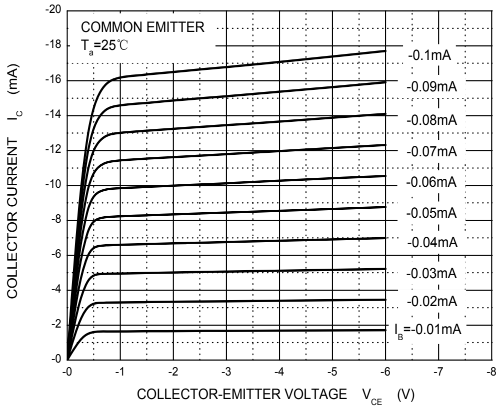
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-600	mA
P_C	Collector Power Dissipation	300	mW
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	625	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55～+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

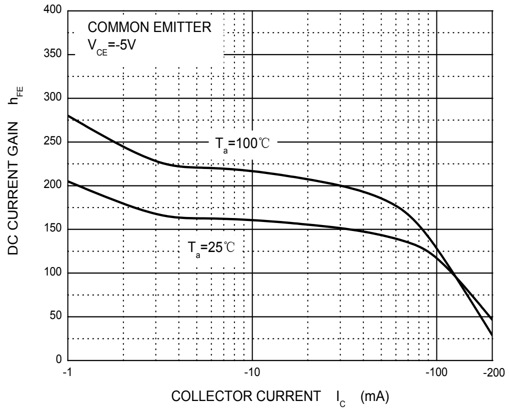
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA, I_E=0	-160			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA, I_B=0	-150			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-10μA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-120V, I_E=0			-50	nA
Emitter cut-off current	I_{EBO}	V_{EB}=-3V, I_C=0			-50	nA
DC current gain	h_{FE}	V_{CE}=-5V, I_C=-1mA	50			
		V_{CE}=-5V, I_C=-10mA	60		300	
		V_{CE}=-5V, I_C=-50mA	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-50mA, I_B=-5mA			-0.5	V
		I_C=-10mA, I_B=-1mA			-0.2	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-50mA, I_B=-5mA			-1	V
		I_C=-10mA, I_B=-1mA			-1	V
Transition frequency	f_T	V_{CE}=-10V,I_C=-10mA , f=100MHz	100			MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz			6	pF

Typical Characteristics

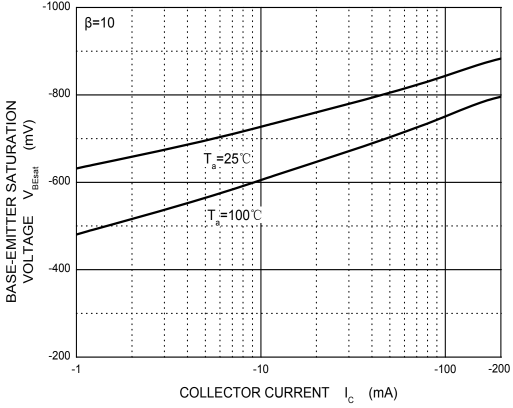
Static Characteristic



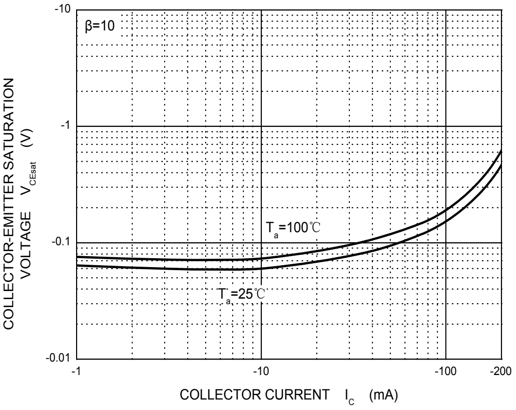
h_{FE} — I_C



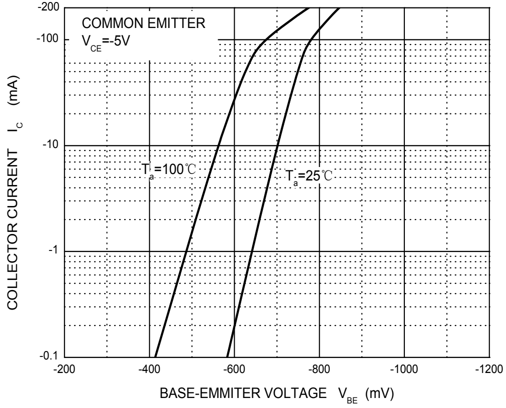
V_{BEsat} — I_C



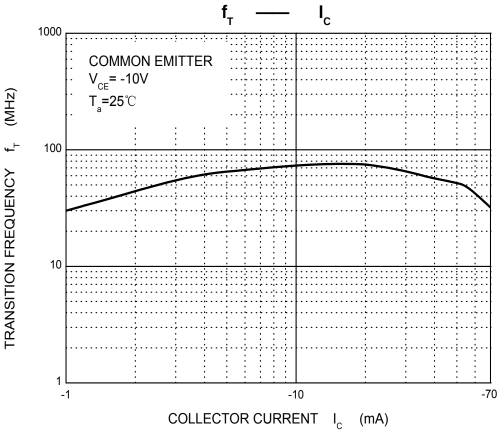
V_{CEsat} — I_C



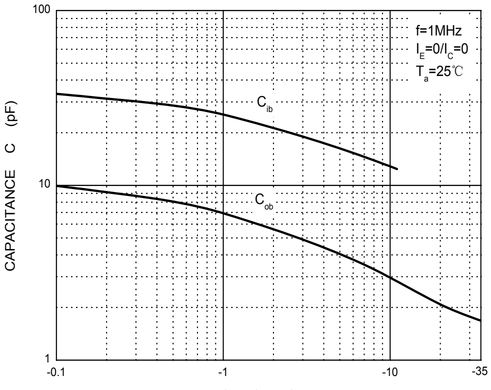
I_C — V_{BE}



f_T — I_C



C_{ob}/ C_{ib} — V_{CB}/ V_{EB}



P_C — T_a