

自主封測 品質把控 售後保障

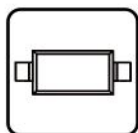
WEB | WWW.TDSEMIC.COM 



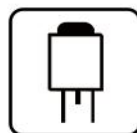
電源管理



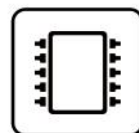
顯示驅動



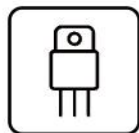
二三極管



LDO穩壓器



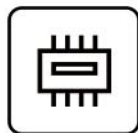
觸摸芯片



MOS管



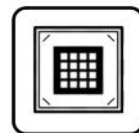
運算放大器



存儲芯片



MCU



串口通信

MMBT5401 2L-TD (0.42)

產品規格說明書

FEATURES:

- ※ Complementary to MMBT5551
- ※ Collector Current: $I_C=0.6A$
- ※ Ideal for Medium Power Amplification and Switching

MARKING:2L

MAXIMUM RATINGS ($T_a=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	VCBO	-160	V
Collector-Emitter Voltage	VCEO	-150	V
Emitter-Base Voltage	VEBO	-5	V
Collector Current	I_C	-600	mA
Collector Power Dissipation	PC	300	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	416	$^{\circ}C/W$
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature	T_{stg}	-55~+150	$^{\circ}C$

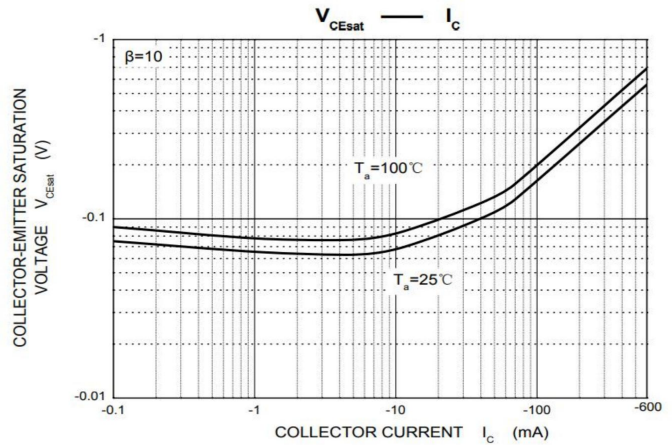
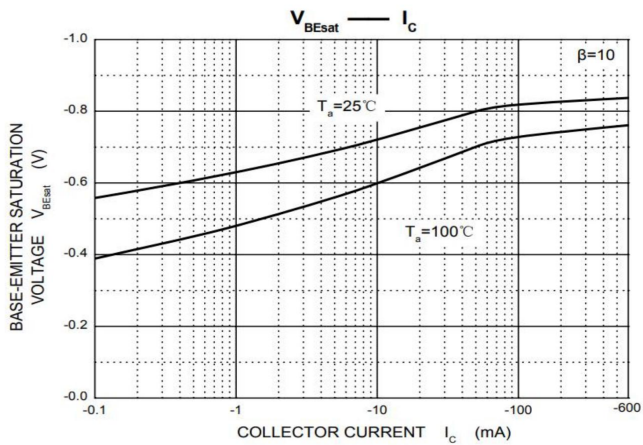
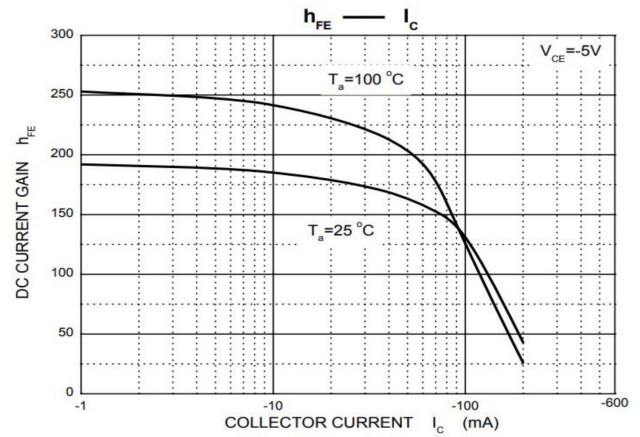
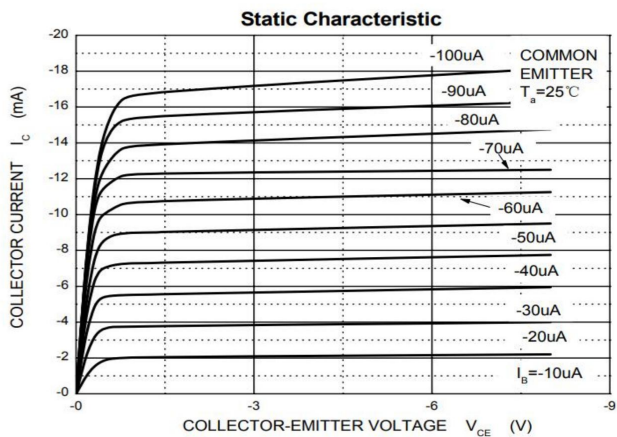
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V(BR)_{CBO}$	$I_C = -100\mu A, I_E = 0$	-160			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	$I_C = -1mA, I_B = 0$	-150			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	$I_E = -10\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -120V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4V, I_C = 0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -5V, I_C = -1mA$	80			
	h_{FE}	$V_{CE} = -5V, I_C = -10mA$	100		300	
	h_{FE}	$V_{CE} = -5V, I_C = -50mA$	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	
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -50mA, I_B = -5mA$			-1.	
		$I_C = -10mA, I_B = -1mA$			-1	
Transition frequency	f_T	$V_{CE} = 6V, I_C = 20mA$ $f = 30MHz$	100			MHz

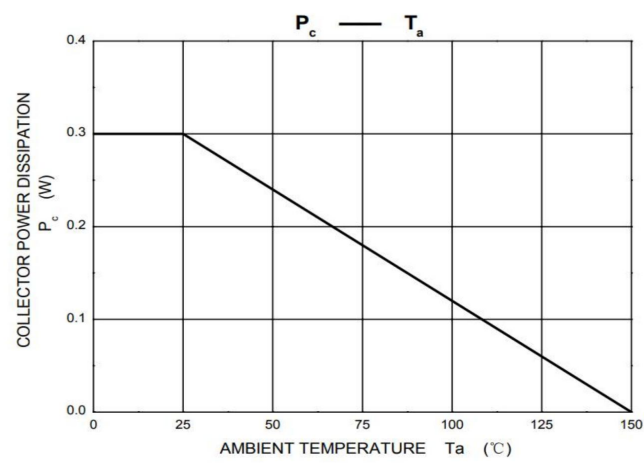
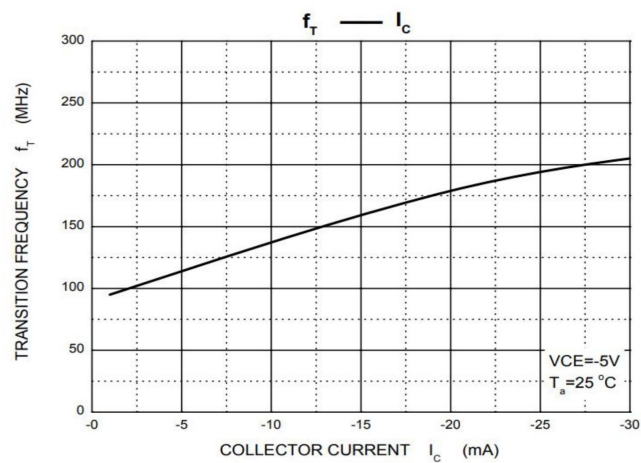
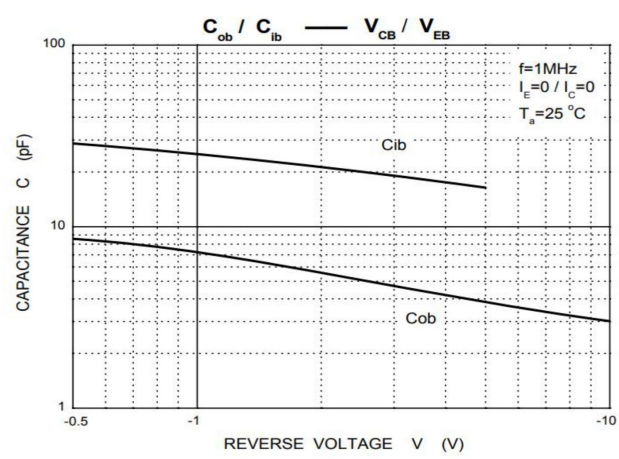
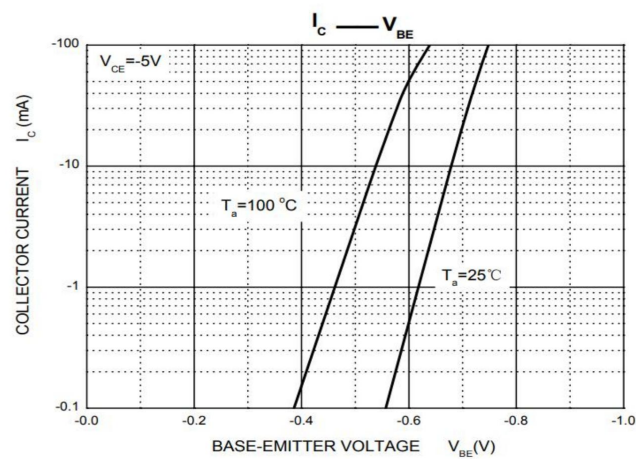
CLASSIFICATION OF h_{FE}

Rank	L	H
Range	100-200	200-300

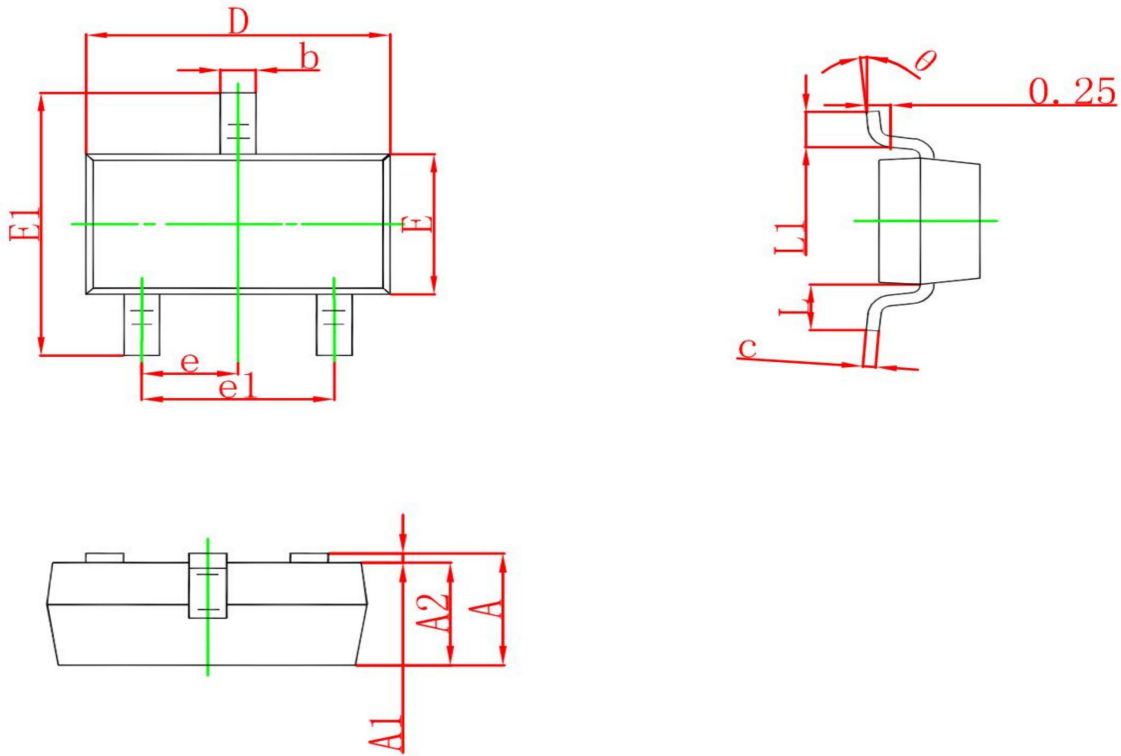
Typical Electrical and Thermal Characteristics



Typical Electrical and Thermal Characteristics



SOT-23 Package Outline Dimesions



	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°