

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

MMBT13001-TD

產品規格說明書

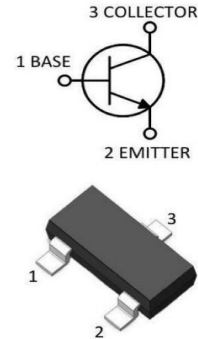
»Features

$V_{CE} = 420V$
 $I_C = 0.2A$
 $f_T = 8MHz @ V_{CE}=20V, I_C=20mA, f=1MHz$

»General Description

- Power switching applications
- Epitaxial planar die constructio
- SOT-23 Plastic Package.

»Pin Configurations



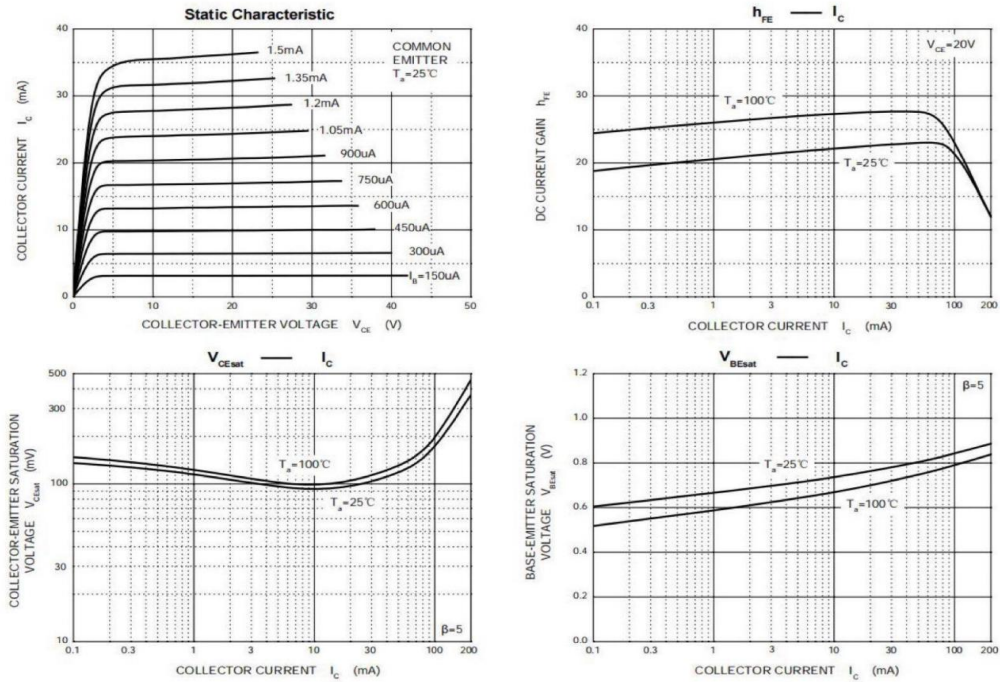
»Absolute Maximum Ratings @T_A=25°C unless otherwise noted

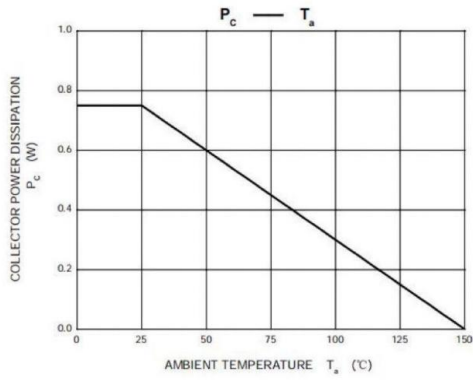
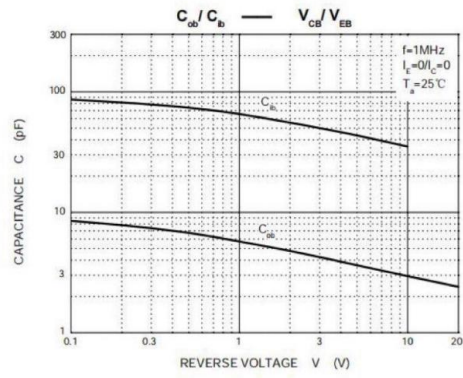
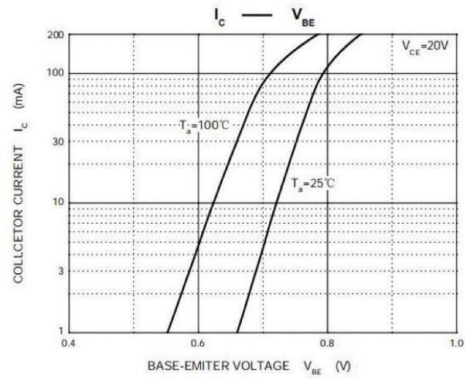
Symbol	Parameter	Value	Unit
VCBO	Collector-Base Voltage	600	V
VCEO	Collector-Emitter Voltage	420	V
VEBO	Emitter-Base Voltage	7	V
IC	Collector Current	0.2	A
PC	Collector Power Dissipation	300	mW
RθJA	Thermal Resistance From Junction To Ambient	400	°C/W
TJ ,Tstg	Operation Junction And Storage Temperature Range	-55~+150	°C

»Electrical Characteristics @T_A=25°C unless otherwise noted

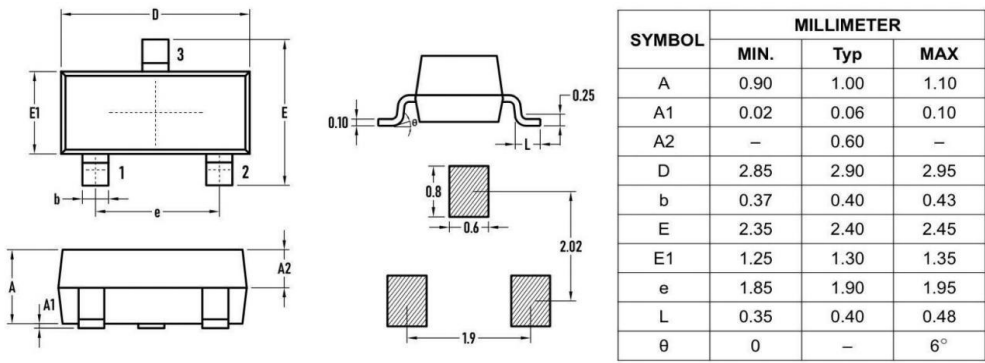
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=100\mu A, I_E=0$	600			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1mA, I_B=0$	420			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=100\mu A, I_C=0$	7			V
I_{CBO}	Collector cut-off current	$V_{CB}=600V, I_E=0$			100	μA
I_{CEO}	Collector cut-off current	$V_{CE}=400V, I_E=0$			200	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=7V, I_C=0$			100	μA
$h_{FE(1)}$	DC current gain(1)	$V_{CE}=20V, I_C=20mA$	18		30	
$h_{FE(2)}$	DC current gain(2)	$V_{CE}=10V, I_C=0.25mA$	5			
$V_{CE(sat)1}$	Collector-emitter saturation voltage	$I_C=50mA, I_B=10mA$			0.5	V
$V_{BE(sat)1}$	Base-emitter saturation voltage				1.2	V
f_T	Transition frequency	$V_{CE}=20V, I_C=20mA, f=1MHz$	8			MHz
t_f	Fall time	$I_C=50mA, V_{CC}=45V, I_{B1}=-I_{B2}=5mA$			0.3	μS
t_s	Storage time				1.5	μS

»Typical Performance Characteristics (($T_J = 25^\circ\text{C}$, unless otherwise noted))

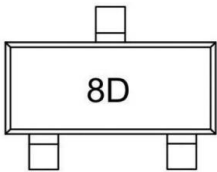




»Package Information SOT-23



»Marking



»Ordering information

Order code	Package	Base qty	Delivery mode
13001	SOT-23	3K	Tape and reel