

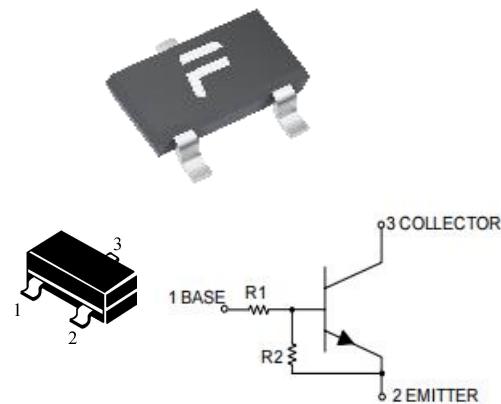
## SOT-23 Digital Transistor 数字晶体管

### ■ Features 特点

NPN With Bias Resistor Network  
带偏置电阻

SOT-23

1. BASE
2. Emitter
3. COLLECTOR



### ■ Absolute Maximum Ratings 最大额定值

Characteristic 特性参数	Symbol 符号	Rating 额定值	Unit 单位
Collector-Base Voltage 集电极基极电压	V <sub>CBO</sub>	50	V
Collector-Emitter Voltage 集电极发射极电压	V <sub>CEO</sub>	50	V
Collector Current 集电极电流	I <sub>C</sub>	100	mA
Power dissipation 耗散功率	P <sub>C</sub> (T <sub>a</sub> =25°C)	246	mW
Thermal Resistance Junction-Ambient 热阻	R <sub>θJA</sub>	508	°C/W
Junction and Storage Temperature 结温和储藏温度	T <sub>J</sub> , T <sub>stg</sub>	-55 to +150	°C

### ■ Device Marking 产品打标

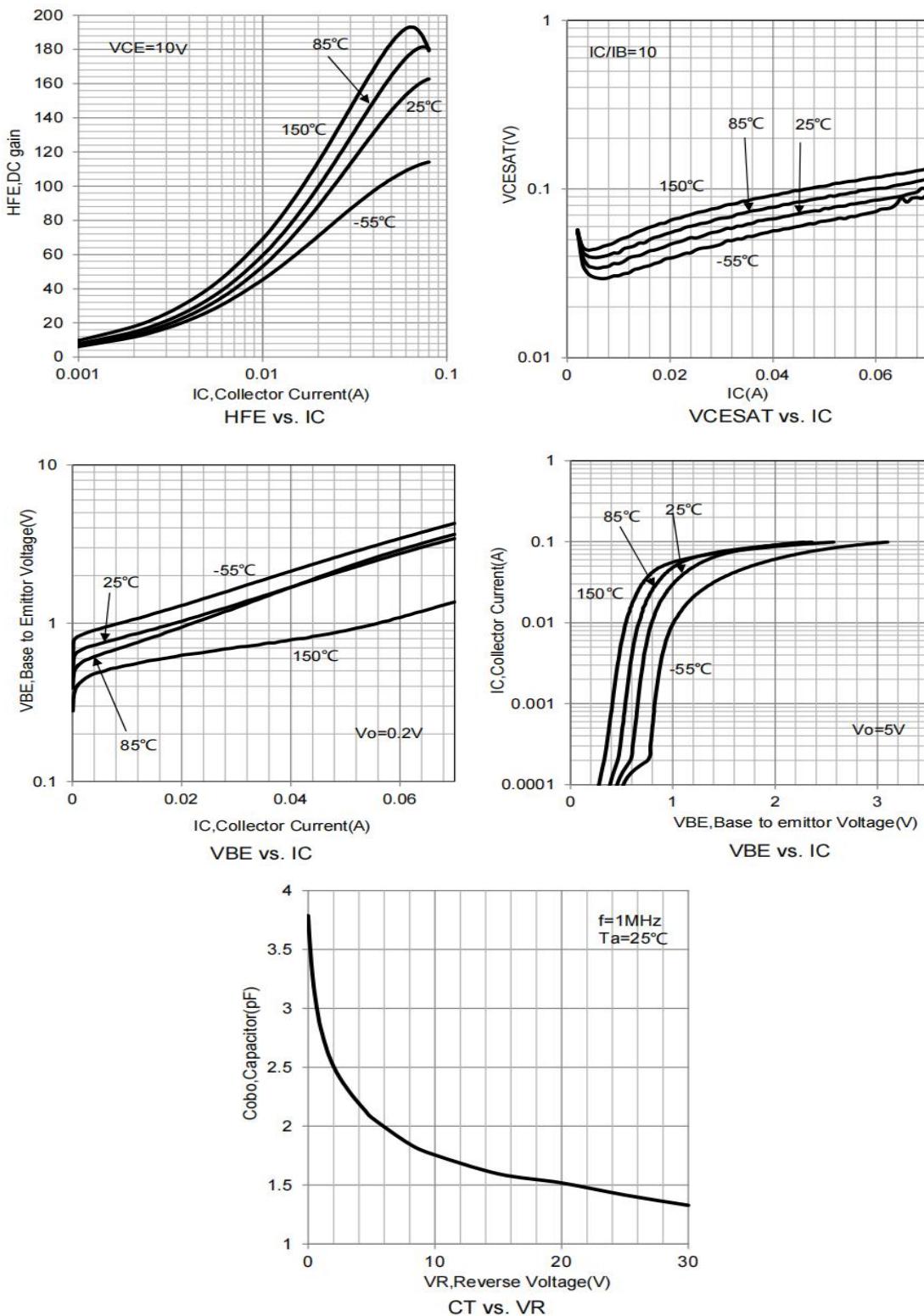
MMUN2235L=A8M

## ■ Electrical Characteristics 电特性

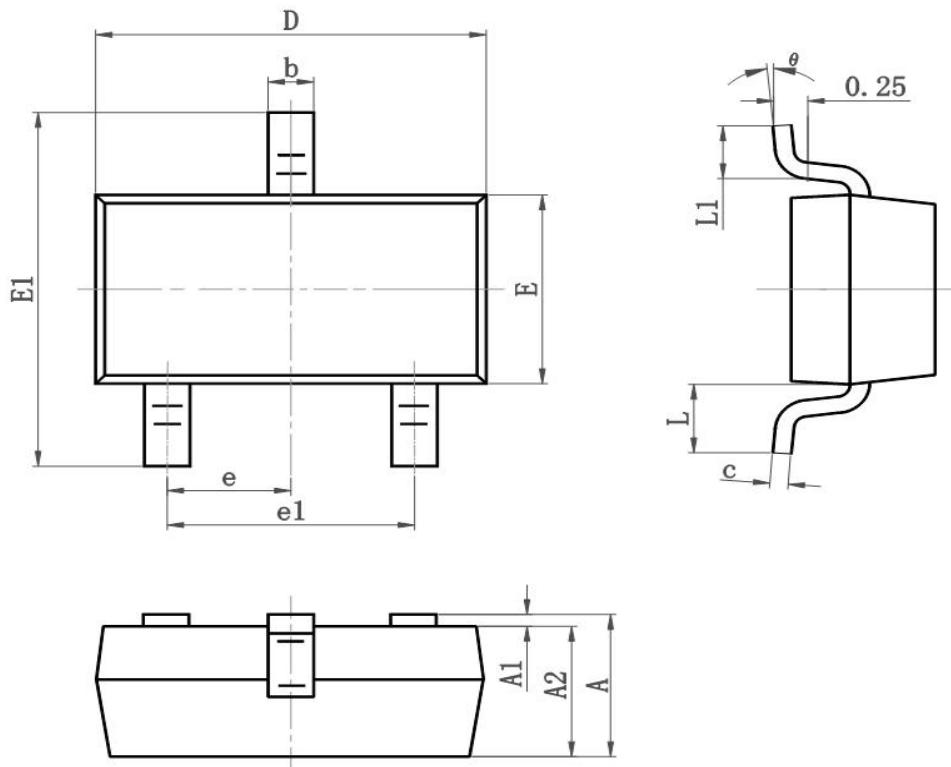
( $T_A=25^\circ\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^\circ\text{C}$ )

Characteristic 特性参数	Symbol 符号	Min 最小值	Type 典型值	Max 最大值	Unit 单位
Collector-Base Breakdown Voltage 集电极基极击穿电压 ( $I_C=10\mu\text{A}$ , $I_E=0$ )	$\text{BV}_{\text{CBO}}$	50	—	—	V
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压 ( $I_C=2\text{mA}$ , $I_B=0$ )	$\text{BV}_{\text{CEO}}$	50	—	—	V
Collector-Base Leakage Current 集电极基极漏电流 ( $V_{CB}=50\text{V}$ , $I_E=0$ )	$I_{\text{CBO}}$	—	—	0.1	$\mu\text{A}$
Collector-Emitter Leakage Current 集电极发射极漏电流 ( $V_{CE}=50\text{V}$ , $I_E=0$ )	$I_{\text{CEO}}$	—	—	0.5	$\mu\text{A}$
Emitter-Base Leakage Current 发射极基极漏电流 ( $V_{EB}=6\text{V}$ , $I_C=0$ )	$I_{\text{EBO}}$	—	—	0.2	mA
DC Current Gain 直流电流增益 ( $V_{CE}=10\text{V}$ , $I_C=5\text{mA}$ )	$H_{\text{FE}}$	80	—	—	
Collector-Emitter Saturation Voltage 集电极发射极饱和压降 ( $I_C=10\text{mA}$ , $I_B=1\text{mA}$ )	$V_{\text{CE}(\text{sat})}$	—	—	0.25	V
Output Voltage (on) 输出电压(导通) ( $V_{CC} = 5.0 \text{ V}$ , $V_B = 2.5 \text{ V}$ , $R_L = 1.0\text{K}\Omega$ )	$V_{\text{OL}}$	—	—	0.2	V
Output Voltage (on) 输出电压(导通) ( $V_{CC} = 5.0 \text{ V}$ , $V_B = 0.25 \text{ V}$ , $R_L = 1.0\text{K}\Omega$ )	$V_{\text{OH}}$	4.9	—	—	V
Input Resistor 输入电阻	$R_1$	1.54	2.2	2.86	$\text{K}\Omega$
Resistor Ratio 电阻比率	$R_1/R_2$	0.038	—	0.056	

■ Typical Characteristic Curve 典型特性曲线



■ Dimension 外形封装尺寸



Symbol	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	0.050	0.055
E1	2.250	2.550	0.089	0.100
e	0.900	1.00	0.035	0.039
e1	1.800	2.000	0.071	0.079
L	0.500	0.600	0.020	0.024
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°