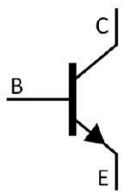


SOT-23 NPN Silicon NPN transistor in a SOT-23 Plastic Package.

EB , (150) $I_B=5\text{mA}$ 1
High V_{EBO} , high reverse h_{FE} (typ.150, $V_{CE}=-2\text{V}$, $I_C=-2\text{mA}$), low on resistance ($R_{on}=1\ \Omega$, $I_B=5\text{mA}$).

For muting and switching applications.



PIN 1 Base PIN 2 Emitter PIN 3 Collector

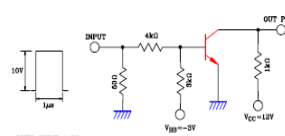
/ h_{FE} Classifications & Marking

h_{FE} Classifications
Symbol

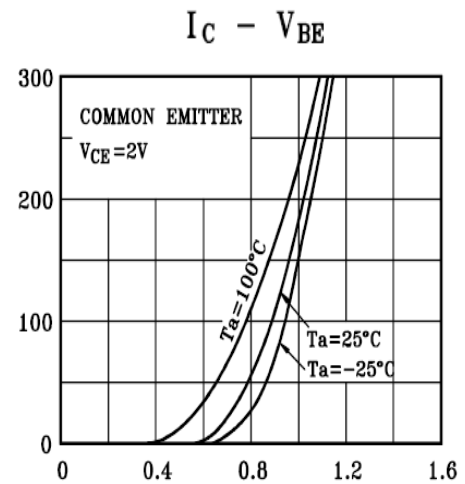
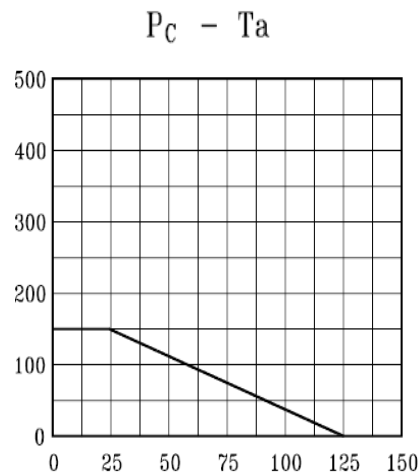
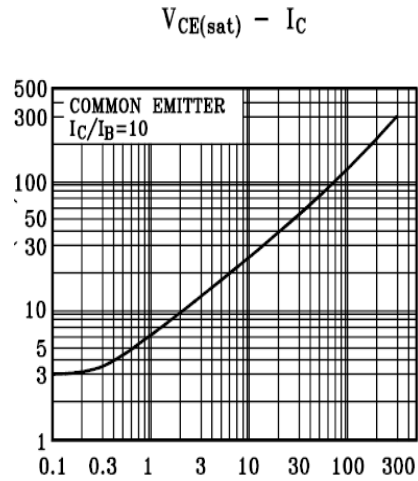
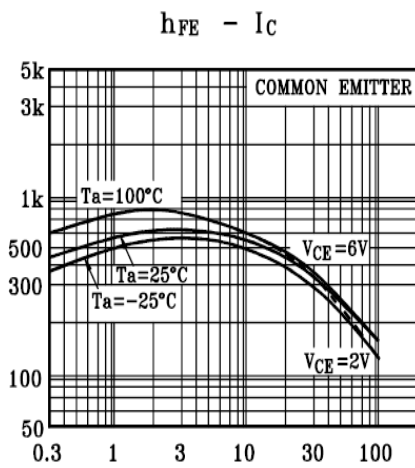
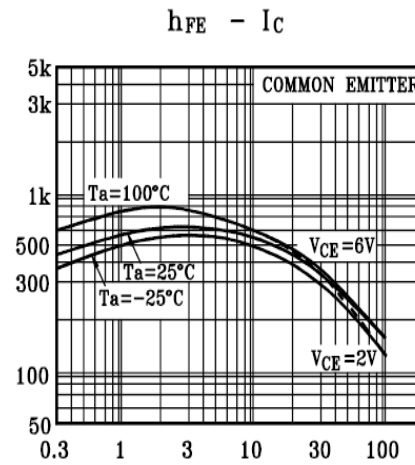
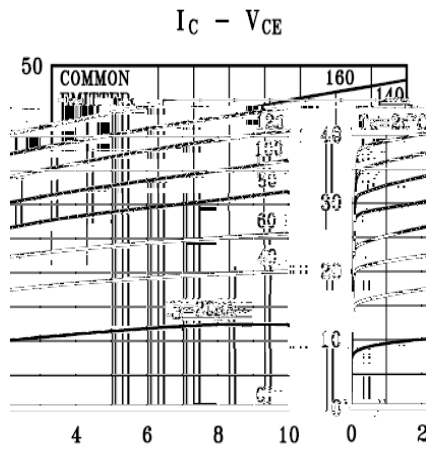
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	25	V
Collector Current	I_C	300	mA
Base Current	I_B	60	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V _{CBO}	I _C =100uA	50			V
Collector to Base Breakdown Voltage	V _{CEO}	I _C =500uA	20			V
Emitter to Base Breakdown Voltage	V _{EBO}	I _E =100uA	25			V
Collector Cut-Off Current	I _{CBO}	V _{CB} =50V I _E =0			0.1	A
Emitter Cut-Off Current	I _{EBO}	V _{EB} =25V I _C =0			0.1	A
DC Current Gain	h _{FE}	V _{CE} =2.0V I _C =4.0mA	200		1200	
Base-Emitter Voltage	V _{BE}	V _{CE} =2.0V I _C =4.0mA		0.61		V
Collector to Emitter Saturation Voltage	V _{CE(sat)}	I _C =30mA I _B =3.0mA		0.042	0.3	V
Transition Frequency	f _T	V _{CE} =6.0V I _C =4.0mA		30		MHz
Collector Output Capacitance	C _{ob}	V _{CB} =10V I _E =0 f=1.0MHz		4.8	7	pF
Turu-On Time	T _{on}		160		nS	
Storage Time	T _{stg}			500		
Fall Time	t _f			130		

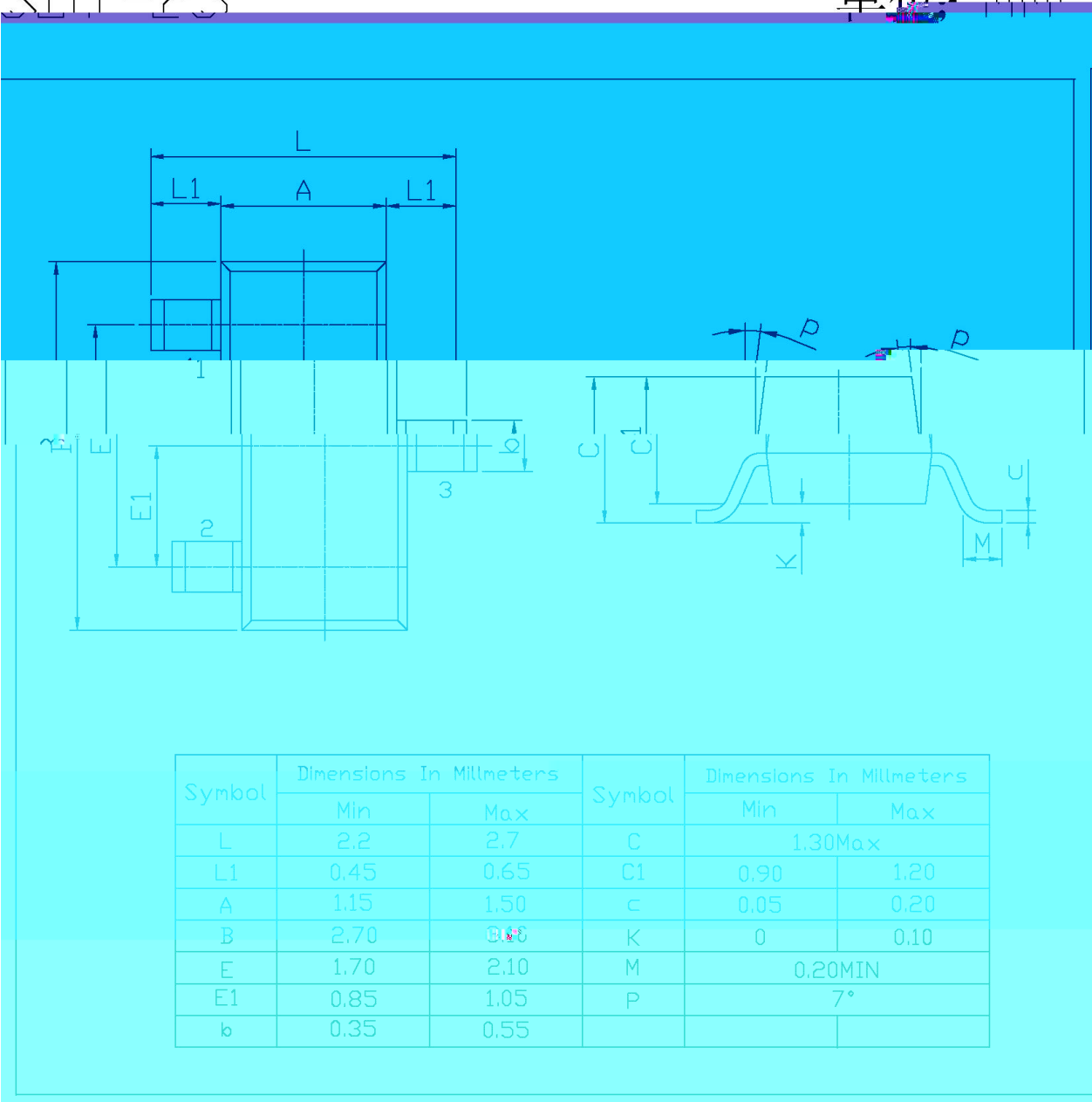
/ Electrical Characteristic Curve



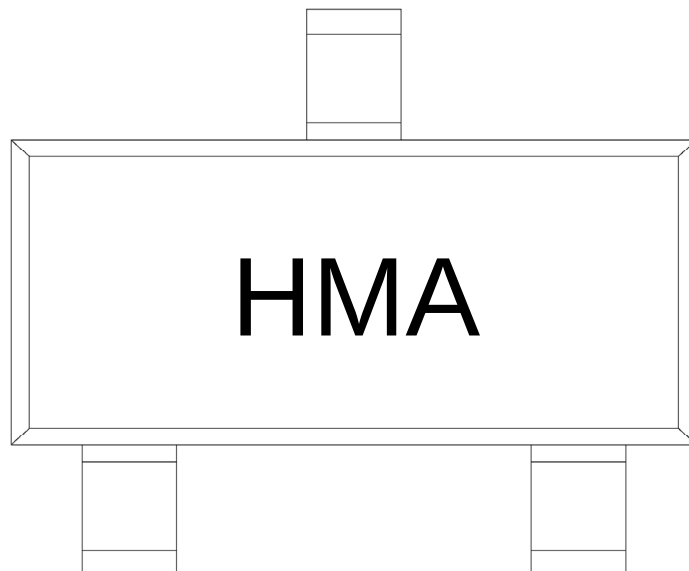
/ Package Dimensions

SOT-23

单位: mm



/ Marking Instructions



H

M

A h_{FE}

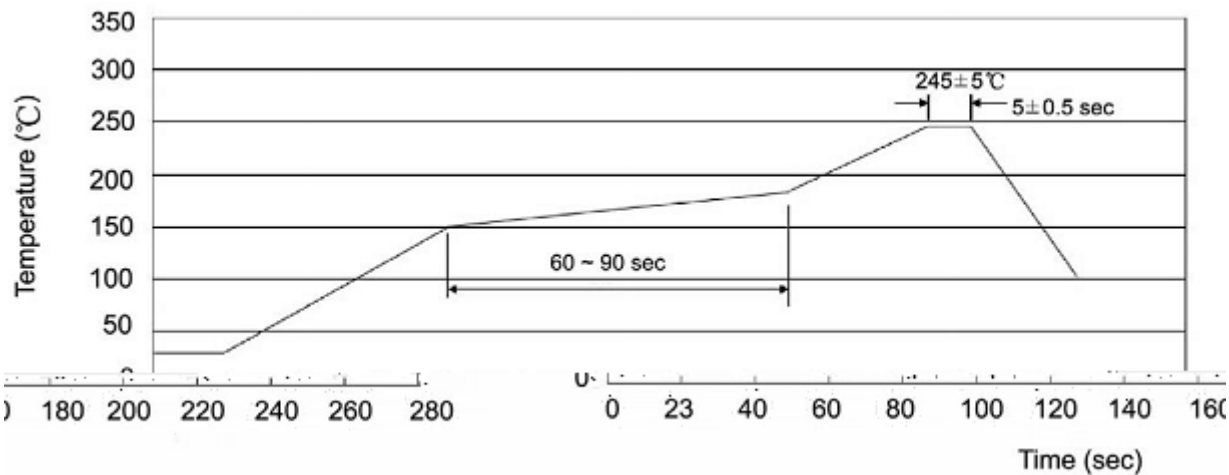
Note:

H Company Code

M Product Type

A h_{FE} Classifications Symbol

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|----|-----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 245±5 | | | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 卷盘	卷盘 盒	只 盒	盒 箱	只 箱		盒	箱

/ Notices