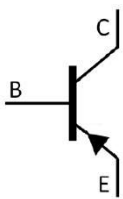


VRW0; < SQS Silicon PNP transistor in a SOT-89 Plastic Package.

5VG99<WD



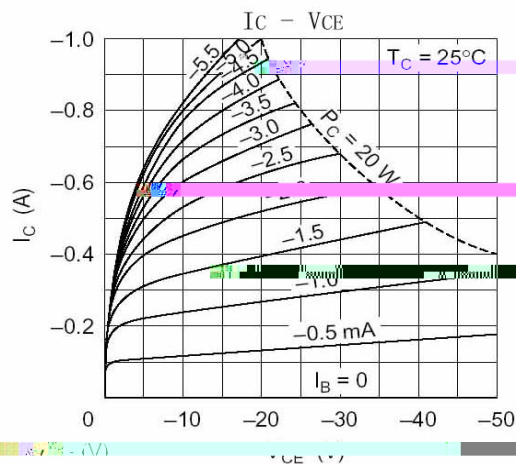
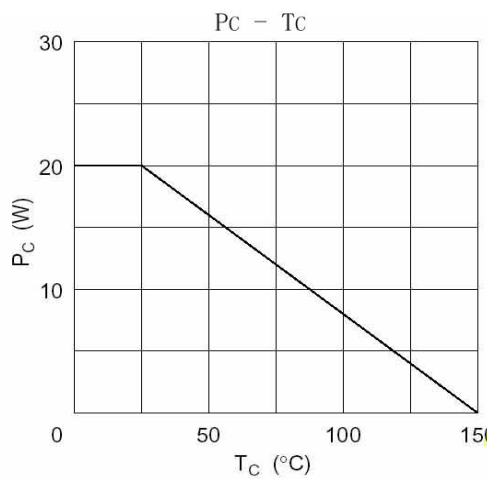
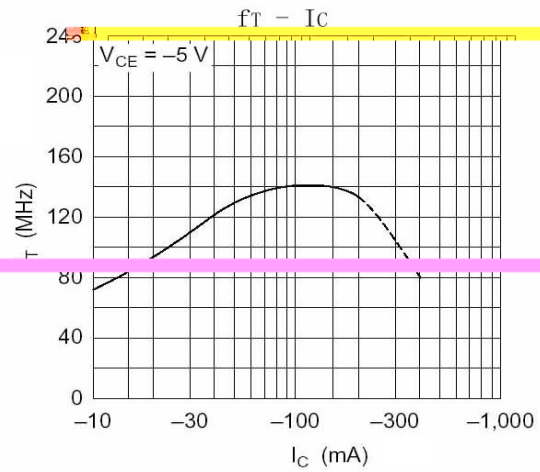
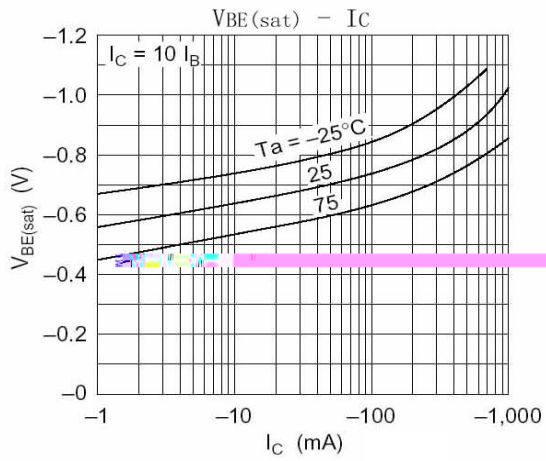
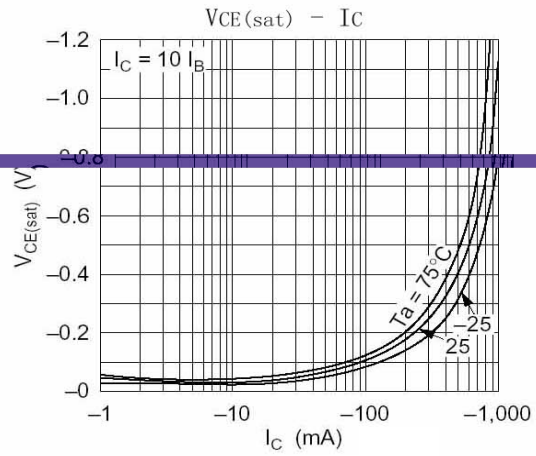
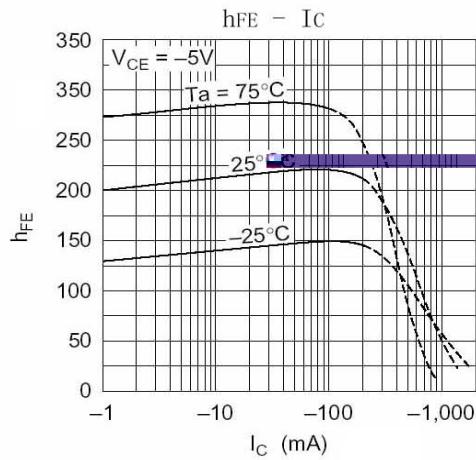
/ Absolute Maximum Ratings(Ta=25 –)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-180	V
Collector to Emitter Voltage	V_{CEO}	-160	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current-Continuous	I_C	-1.5	A
Collector Current-Continuous(Pulse)	I_{CP}	-3.0	A
Collector Power Dissipation	P_C	500	mW
Collector Power Dissipation	$P_C(T_C=25^\circ\text{C})$	20	W
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 Base Breakdown Voltage	V_{CBO}	$I_C=-1.0\text{mA}$ $I_E=0$	-180			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-10\text{mA}$ $R_{BE}=\infty$	-160			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-1.0\text{mA}$ $I_C=0$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-160\text{V}$ $I_E=0$			-10	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-5.0\text{V}$ $I_C=-150\text{mA}$	60		320	
	$h_{FE(2)}$	$V_{CE}=-5.0\text{V}$ $I_C=-500\text{mA}$	30			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}$ $I_B=-50\text{mA}$			-1.0	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=-5.0\text{V}$ $I_C=-150\text{mA}$			-1.5	V
Transition Frequency	f_T	$V_{CE}=-5.0\text{V}$ $I_C=-150\text{mA}$		140		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}$ $I_E=0$ $f=1.0\text{MHz}$		27		pF

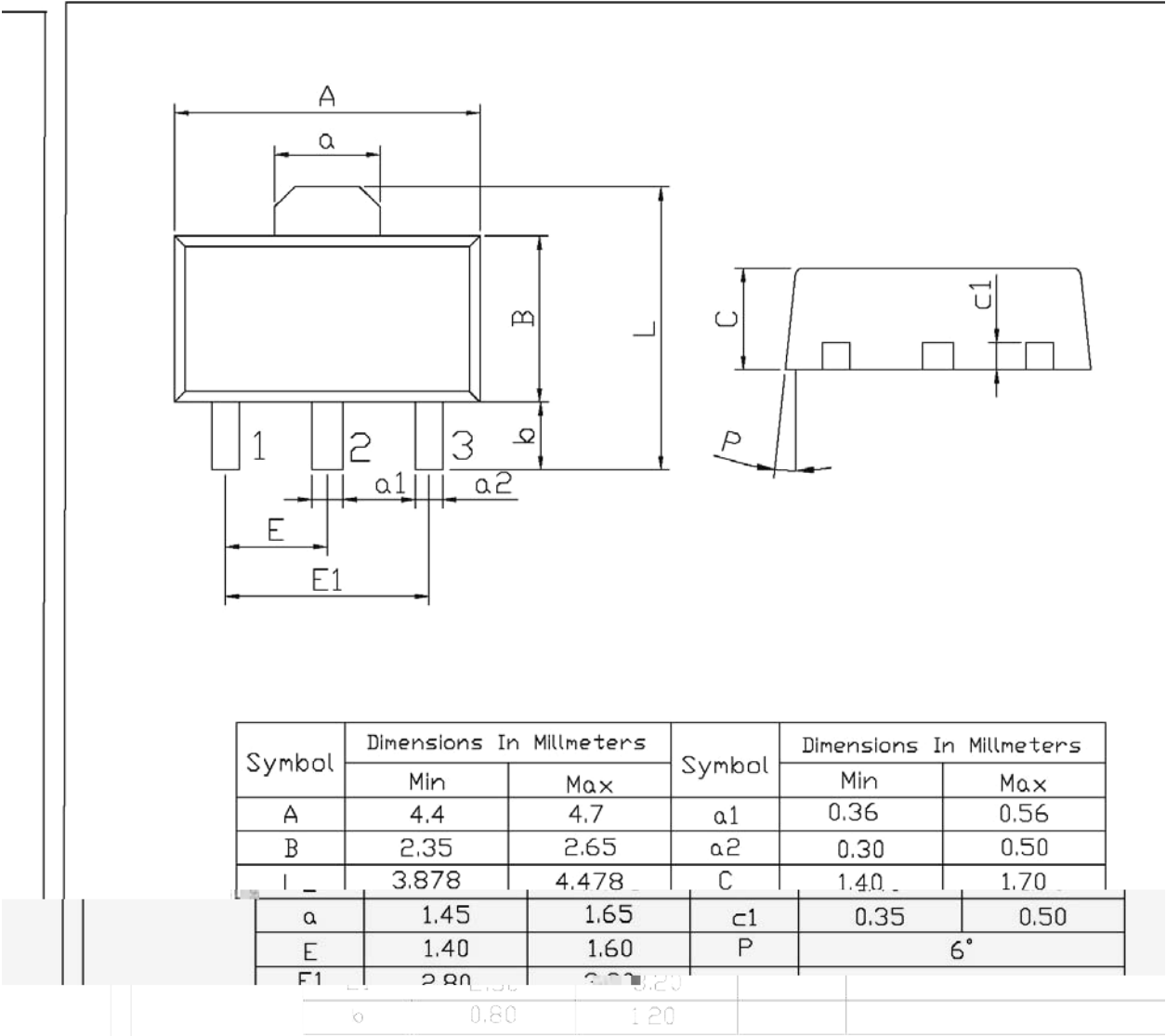
/ Electrical Characteristic Curve



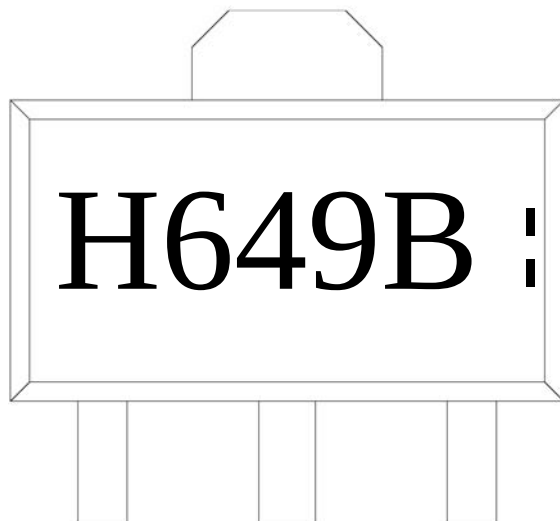
/ Package Dimensions



单位: mm



/ Marking Instructions



H

649

B h_{FE}

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Note:

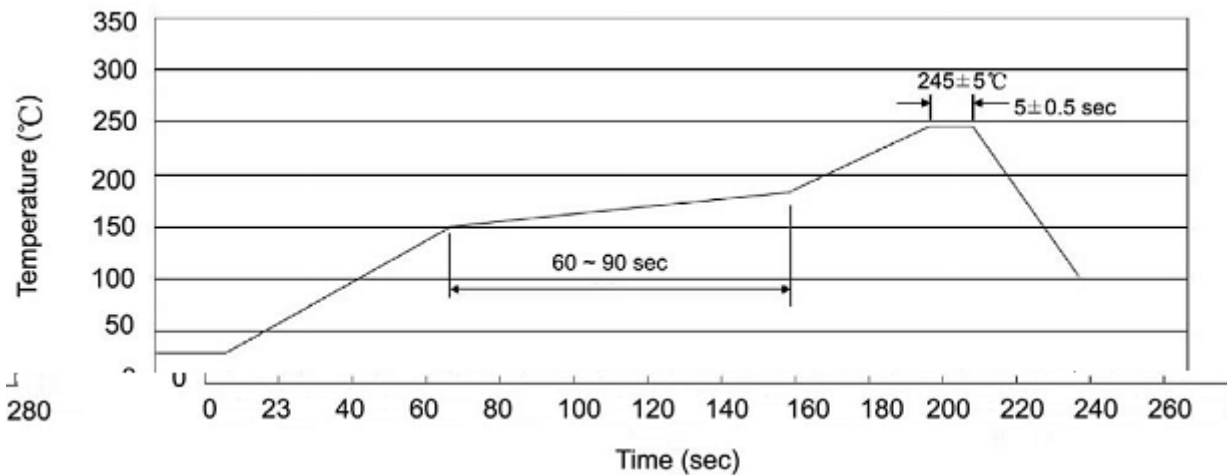
H: Company Code.

649: Product Type.

B h_{FE} Classifications Symbol

** : Lot No. Code, code change with Lot No.

() / Whp shudwxuh Suriloh i ru LU Uhior z Vroghulqj+Se0luhh,



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)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-89	1,000	7	7,000	6	42,000	7 ×12	180×120×180	390×385×205

/ Notices