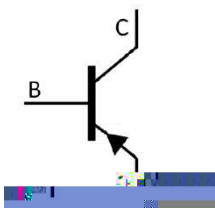


VRW0;< ММ Ё SQS æ М ы s ll 1 Silicon PNP transistor in a SOT-89 Plastic Package.

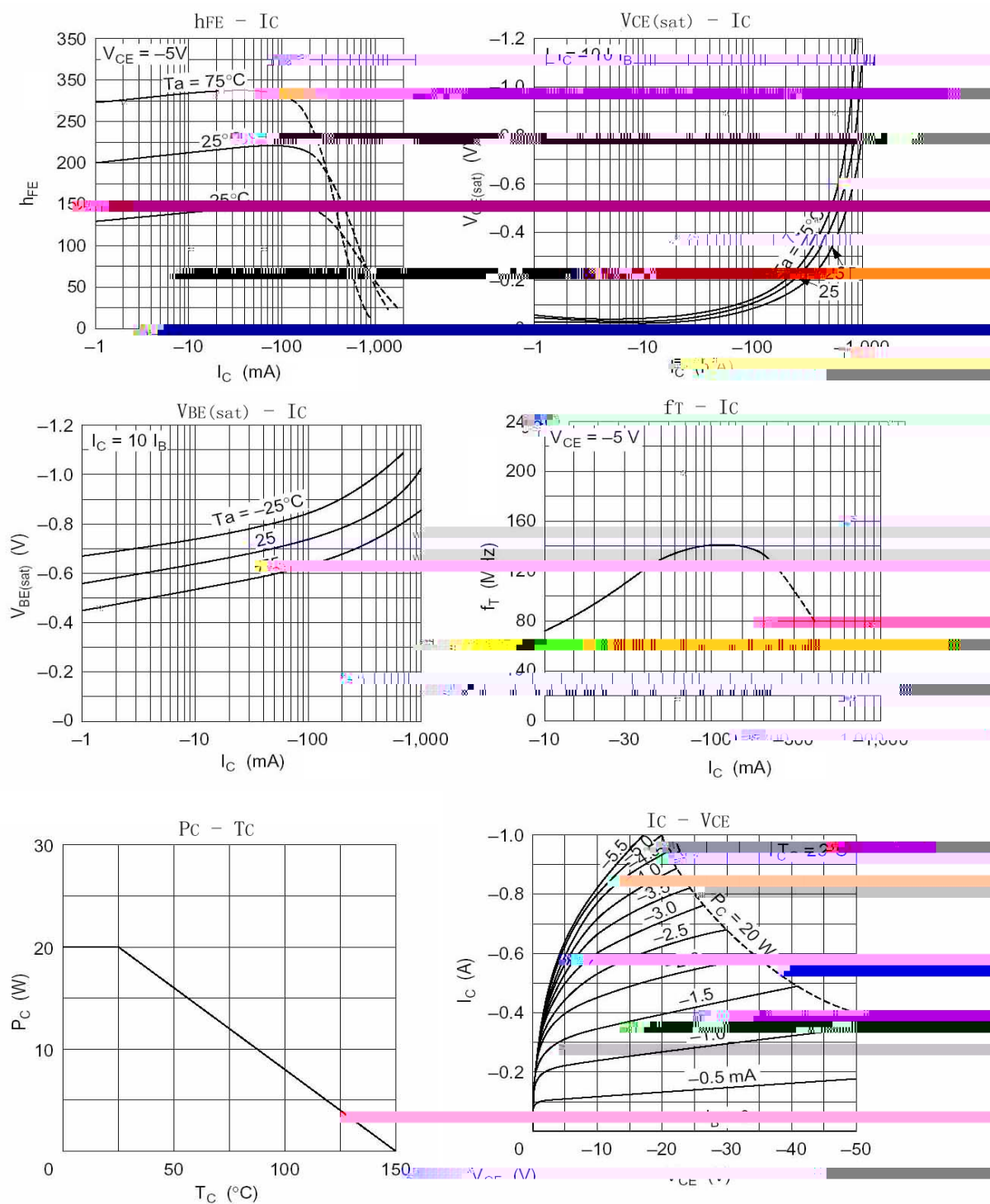
лъ 5VG99<WD й ,
3licon



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	

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	A
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}	$V_{CB}=-10\text{V}$ $f=1.0\text{MHz}$ $I_E=0$		27		pF

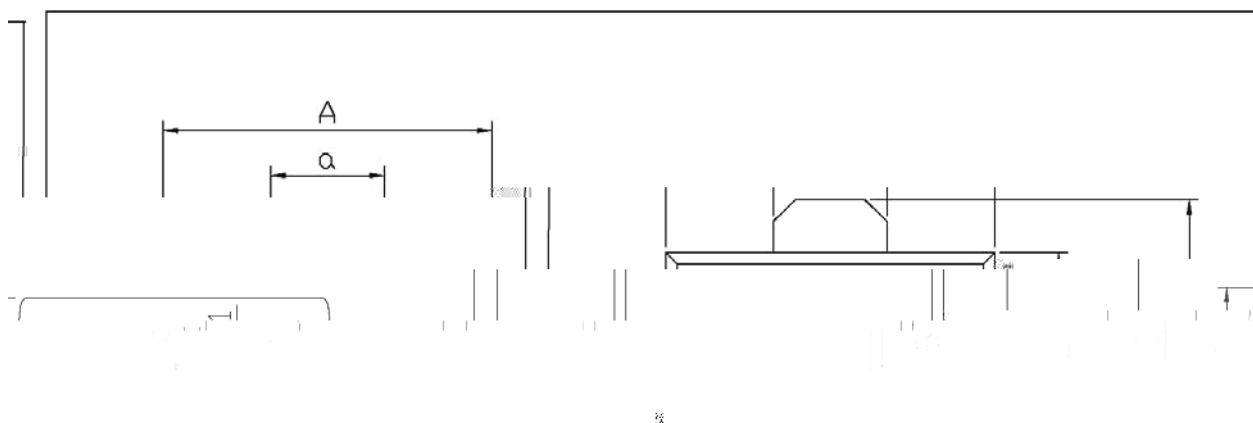
Electrical Characteristic Curve



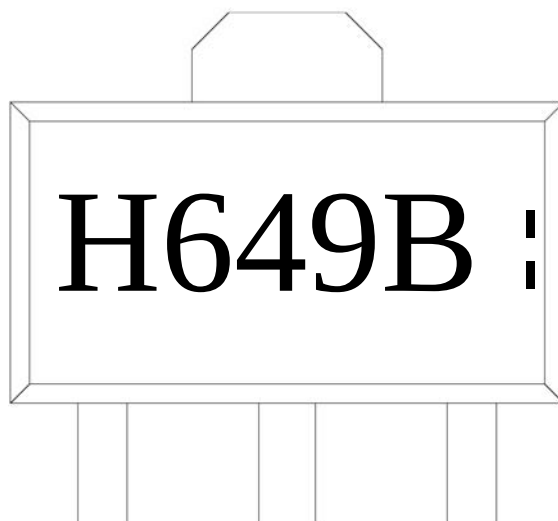
⊂ É Ò Ì ð / Package Dimensions



单位: mm



1. 1. / Marking Instructions



1. 1. X

H X 1. 1. X

649 X 1. 1. X

B X 1. 1. X

-- X 1. 1. X

Note:

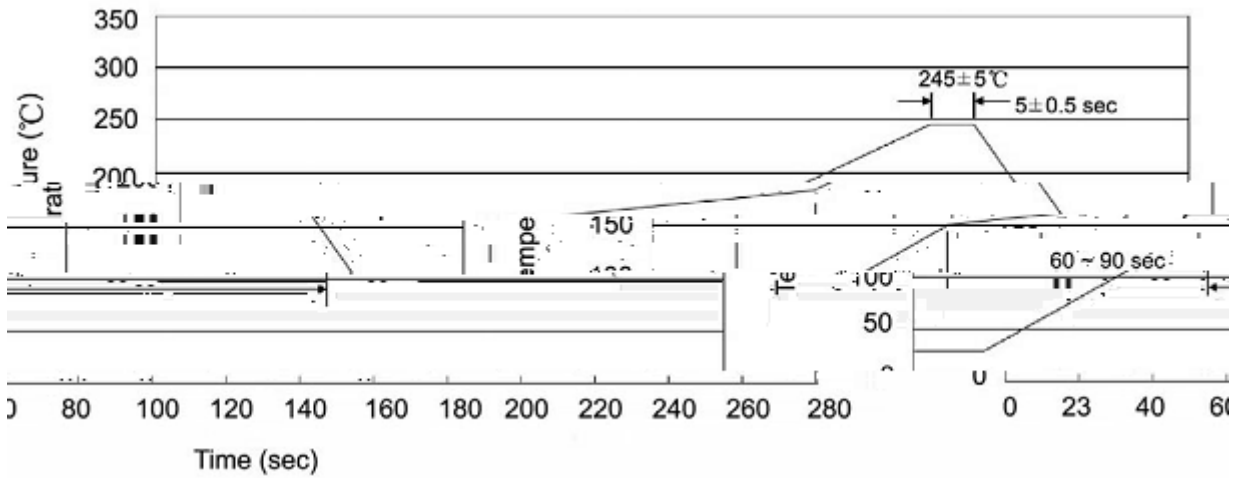
H: Company Code.

649: Product Type.

B X h_{FE} Classifications Symbol

**:

Thermal Characteristics / Whp shudwxuh Suriloh i ru LU Uhior z Vroghulqj +Se01uhh,



1. Preheating:

25~150 °C, Time: 60~90sec;

2. Peak Temp.: 245 °C ± 5 °C, Duration: 5 ± 0.5sec;

3. Cooling Speed: 2~10 °C/sec.

Note:

1. Preheating: 25~150 °C, Time: 60~90sec.

2. Peak Temp.: 245 °C ± 5 °C, Duration: 5 ± 0.5sec.

3. Cooling Speed: 2~10 °C/sec.

Resistance to Soldering Heat Test Conditions

Temp.: 260 ± 5 °C, Time: 10 ± 1 sec.

Temp.: 260 ± 5

Time: 10 ± 1 sec

Packaging SPEC.

REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT-89	1,000	7	7,000	6	42,000	7 × 12	180 × 120 × 180	390 × 385 × 205

Notices