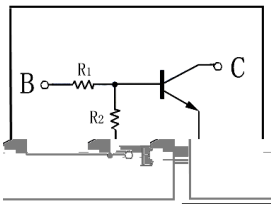
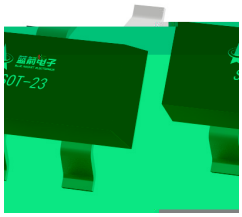
SOT-23 NPN Silicon NPN Digital transistor in a SOT-23 Plastic Package.

AEC-Q101

With built-in bias resistors, simplify circuit design, reduce a quantity of parts and manufacturing process, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

Switching, inverter circuit, interface circuit and driver circuit applications, Meet the stringent requirements of automotive applications.

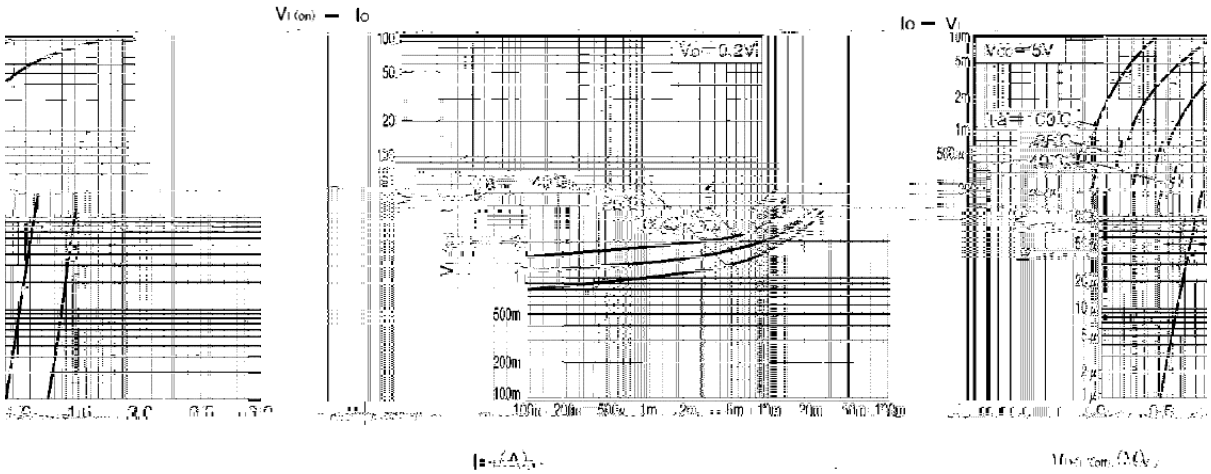


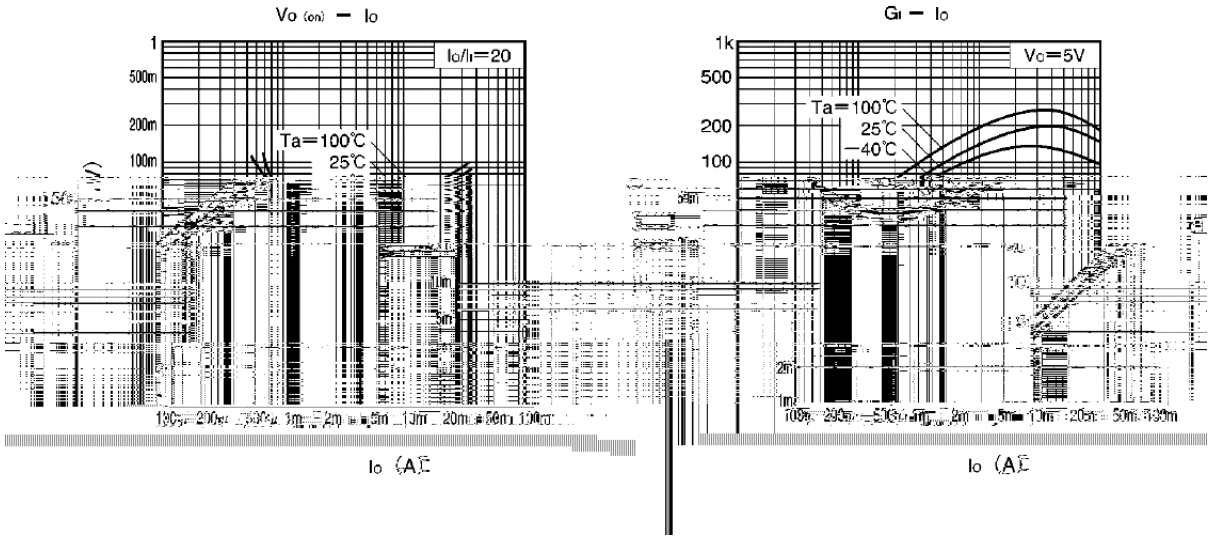


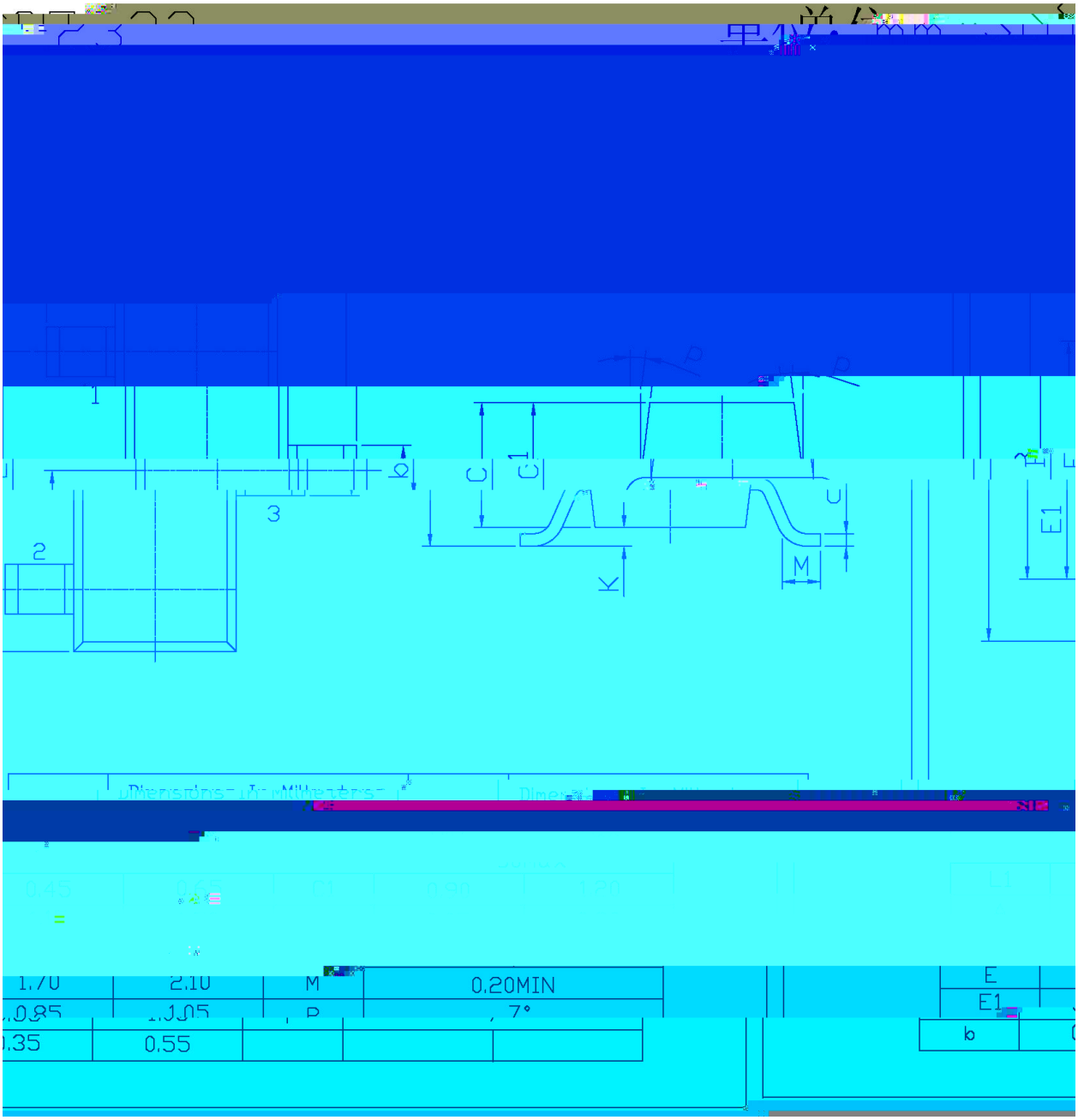
PIN 1 Base PIN 2 Emitter PIN 3 Collector

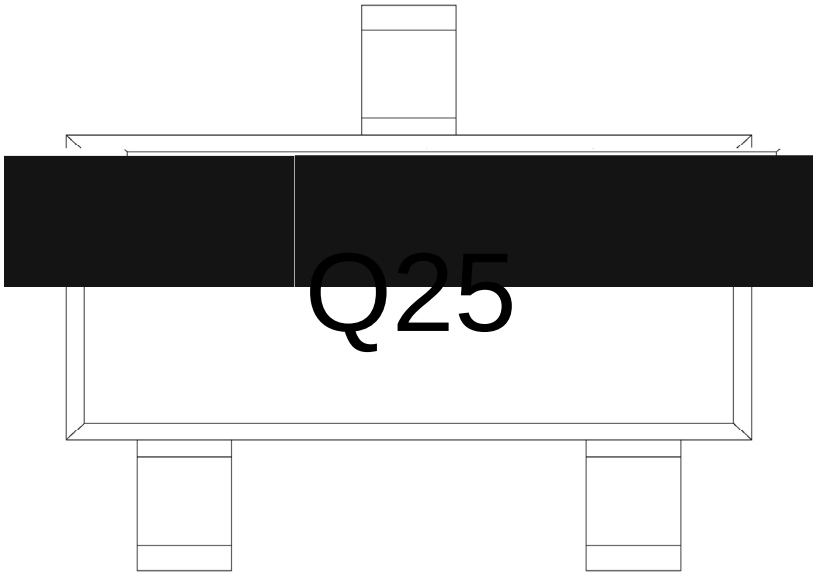
Marking	Q25

Parameter	Symbol	Rating	Unit
Output Voltage	V_{CC}	50	V
Input Voltage	V_{IN}		


VI (on) — Io
Vo=0.2Vi
Io — VI
Vcc=5V
Ta=100℃
25℃
-40℃


Vo (on) — Io
Io/Ii=20
Ta=100℃
25℃
Io (A)
GI — Io
Vo=5V
Ta=100℃
25℃
-40℃
Io (A)


1
2
3
b
C
C1
K
M
E1
1.70
2.10
M
0.20MIN
0.55
E
E1
b



Q

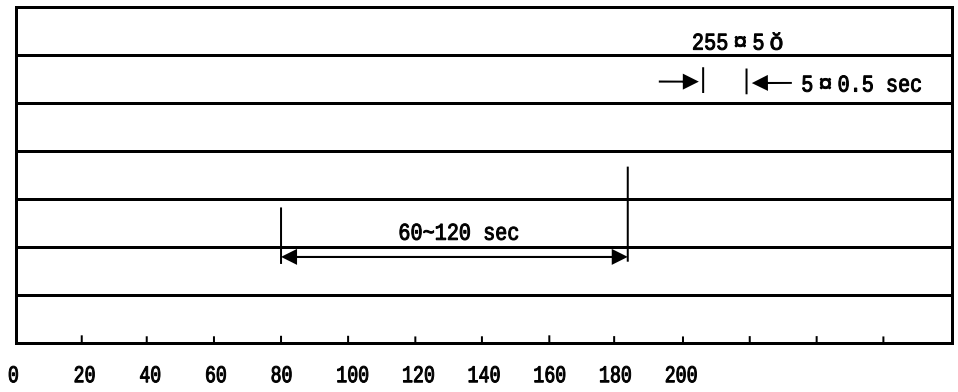
25

Note:

Q: Automobile halogen-free product Code

25 Product Type Code

Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

1		150	200		60	120sec;	1.Preheating:150~200 , Time:60~120sec.
2		255±5				5±0.5sec;	2.Peak Temp.:255±5 , Duration:5±0.5sec.
3				2	10	/sec.	3. Cooling Speed: 2~10 /sec.

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

/ REEL

Package Type	Units					Dimension		(unit mm³)
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOT-23	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205