

Rev.A Oct.-2022

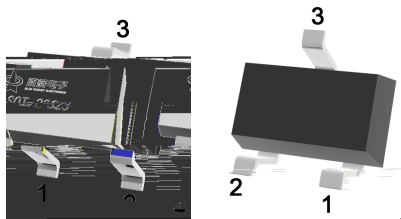
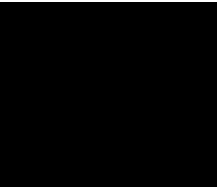
SOT-323

Silicon Diode in a SOT-323 Plastic Package.

SMD

Very small plastic SMD package, High switching speed, High Continuous reverse and Repetitive peak reverse voltage, High Repetitive peak forward current, HF Product.

Applications for High-speed switching. surface mounted circuits.

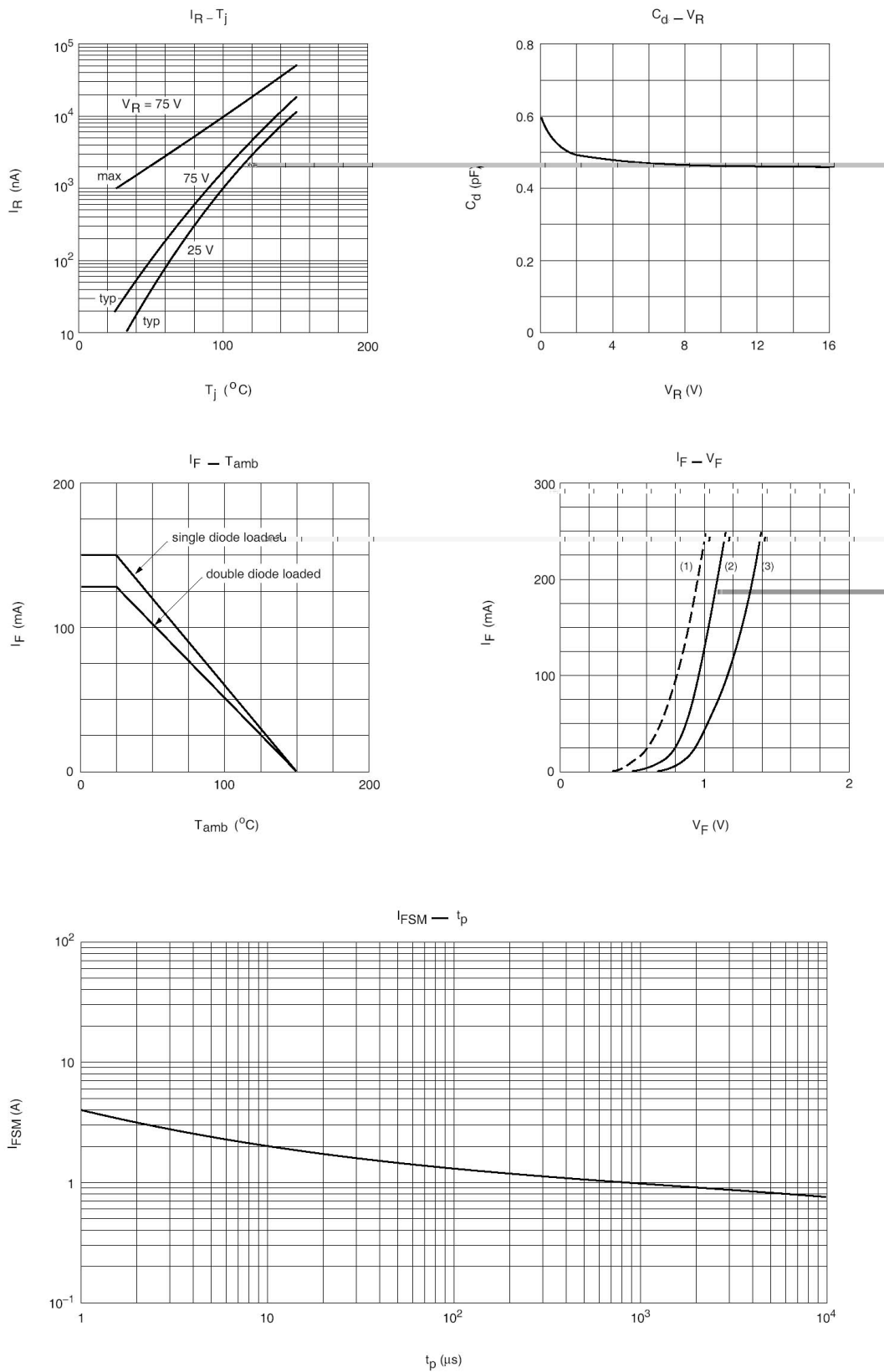


PIN: See Equivalent Circuit.

Marking	HA7
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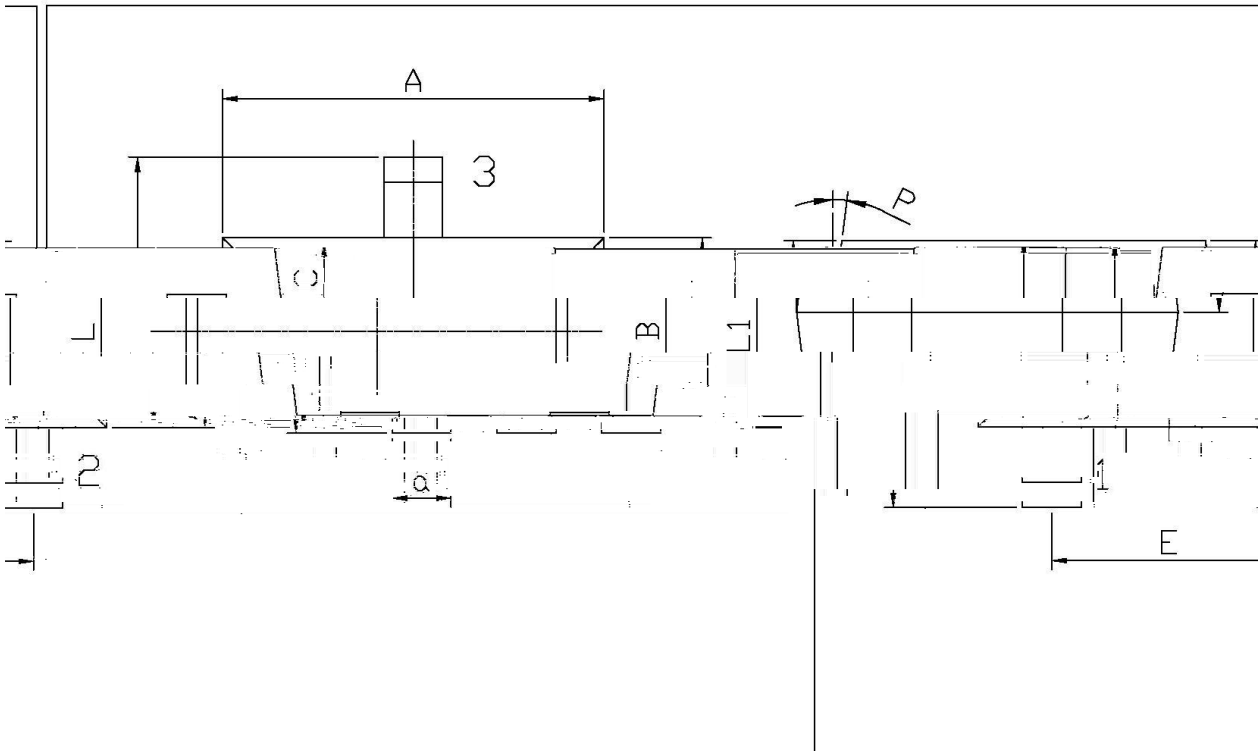
Parameter	Symbol	Rating	Unit
Repetitive Reverse Voltage	V_{RRM}	85	V
Continuous reverse voltage	V_R	75	V
Continuous forward current	$I_{F(1)}$	150	mA
	$I_{F(2)}$	130	mA
Repetitive peak forward current	I_{FRM}	500	mA
Non-repetitive Peak Forward Current	$I_{FSM(1)(t=1\text{ S})}$	0.5	A
	$I_{FSM(2)(t=1\text{ mS})}$	1.0	A
	$I_{FSM(3)(t=1\mu\text{S})}$	4.0	A
Power Dissipation	P_D	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 +150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=1\text{mA}$			715	mV
		$I_F=10\text{mA}$			855	mV
		$I_F=50\text{mA}$			1	V
		$I_F=150\text{mA}$			1.25	V
Instantaneous Reverse Current Total Capacitance	I_R	$V_R=25\text{V}$			30	nA
		$V_R=75\text{V}$			1	μA
		$V_R=25\text{V}$ $T_j=150$			30	μA
		$V_R=75\text{V}$ $T_j=150$			50	μA
Diode capacitance	C_d	$V_R=0$ $f=1\text{MHz}$			1.5	pF
Reverse Recovery Time	t_{rr}	$I_R=1\text{mA}$ $R_L=100\Omega$ $I_F=10\text{mA}$			4	ns
Forward recovery voltage	V_{fr}	$I_F=10\text{mA}$ $t_r=20\text{ns}$			1.75	V

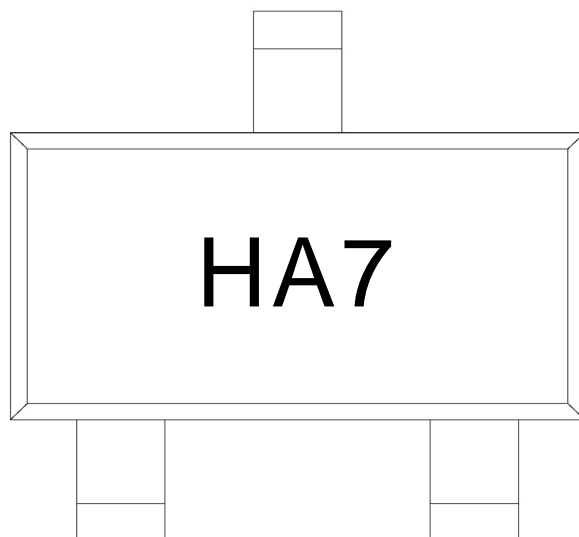


SOT-323

单位: mm



Symbol		Dimensions In Millimeters		Symbol		Dimensions In Millimeters	
Min.	Max.	Symbol	Min.	Symbol	Max.	Symbol	Min.
1.95	2.35	C	0.30		0.50	A	
2.00	2.2	L	0.85		1.15	L	
1.20	1.40	a	0.20		0.40	E	
1.15	1.35	P		7°		B	



H

A7

Note:

H: Company Code

A7: Product Type

Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

- | | | | |
|---|---------|-----------|---|
| 1 | 150 180 | 60 90sec; | 1.Preheating:150~180 , 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. |

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL

 Package Type
 封 形式

 Units 包 量
 装

Dimension 包 (unit: 数

装