

Rev.A Oct.-2022

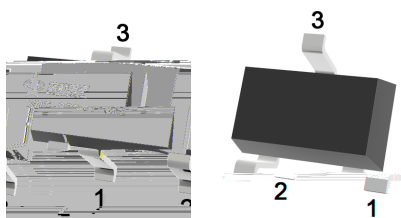
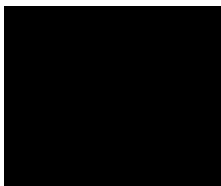
SOT-323

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.

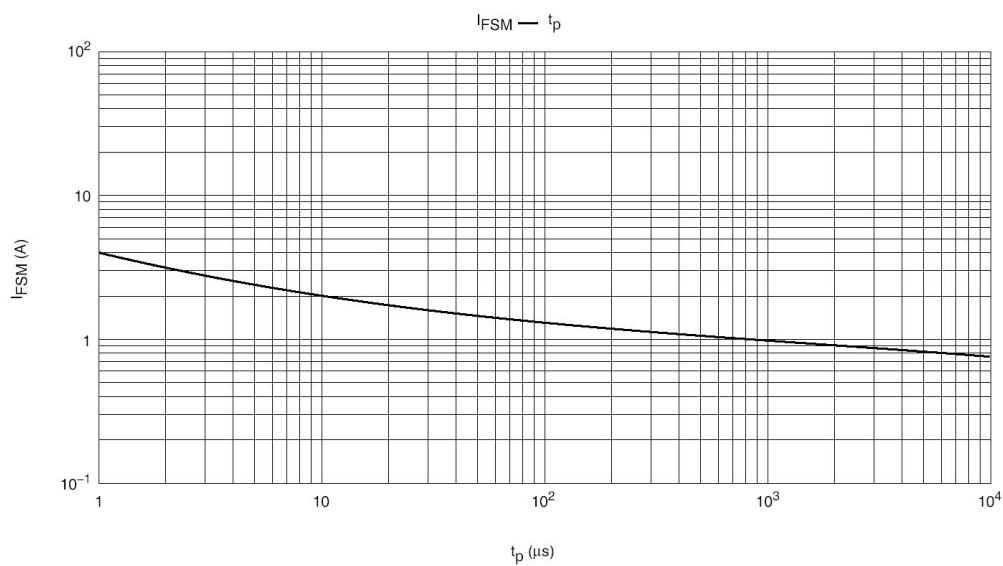
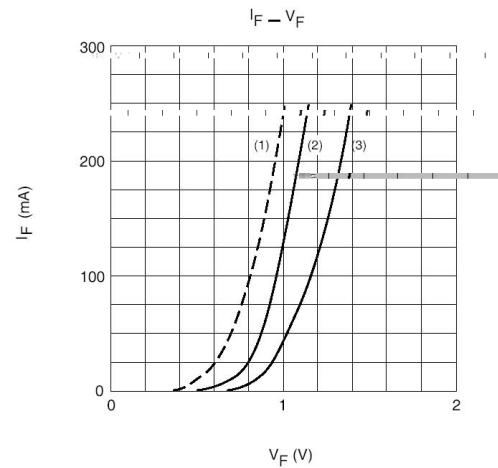
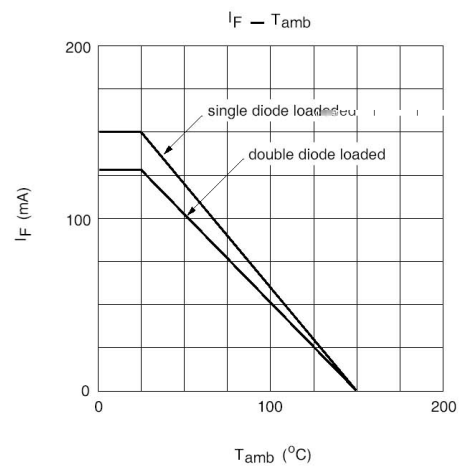
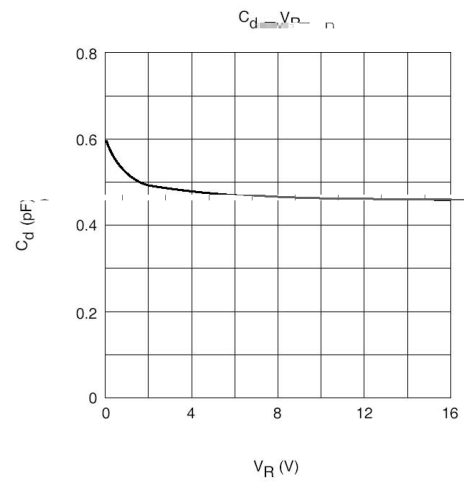
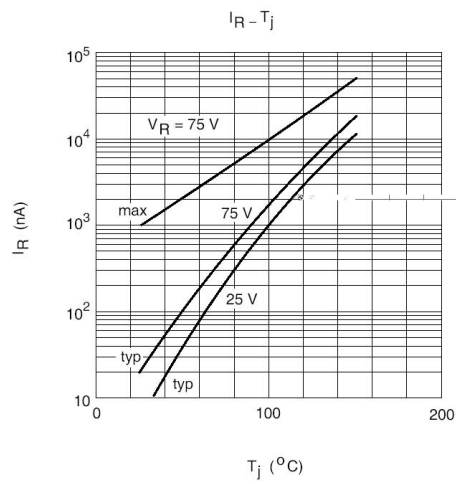


PIN: See Equivalent Circuit.

Marking	HA7
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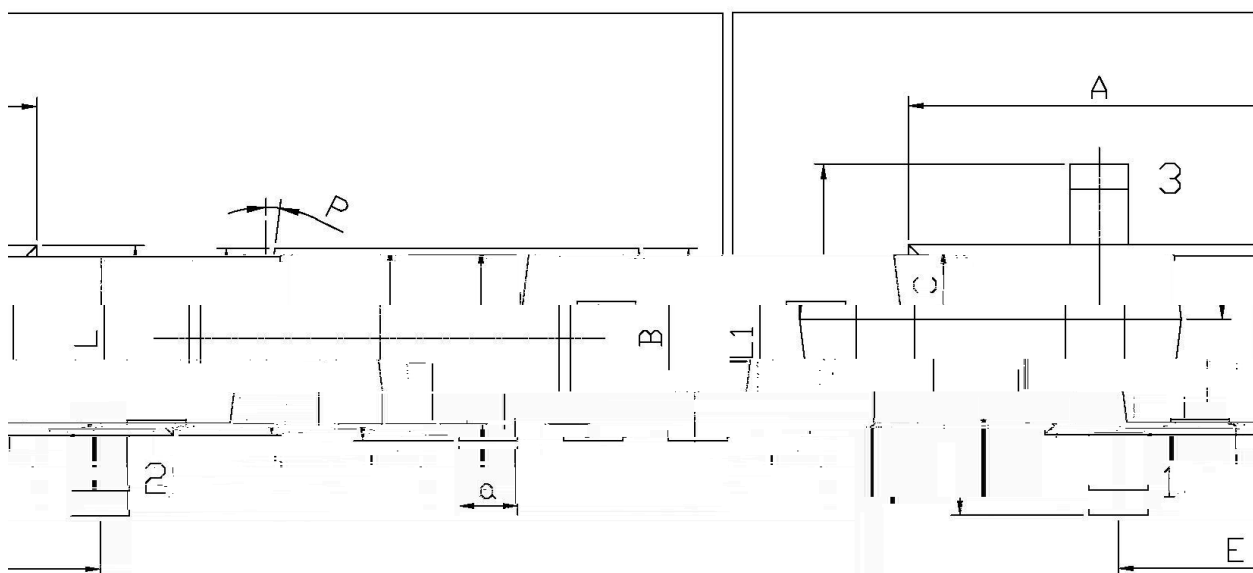
Parameter	Symbol	Rating	Unit
Repetitive Reverse Voltage	V_{RRM}	85	V
Continuous reverse voltage	V_R	75	V
Continuous forward current	$I_{F(1)}$	150	mA
	$I_{F(2)}$	130	mA
Repetitive peak forward current	I_{FRM}	500	mA
Non-repetitive Peak Forward Current	$I_{FSM(1)}(t=1\text{ S})$	0.5	A
	$I_{FSM(2)}(t=1\text{ mS})$	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}	$I_R=1\text{mA}$ $R_L=100\Omega$ $I_F=1\text{mA}$ $I_R=10\text{mA}$			4	ns
Forward recovery voltage	V_{fr}	$I_F=10\text{mA}$ $t_r=20\text{ns}$			1.75	V

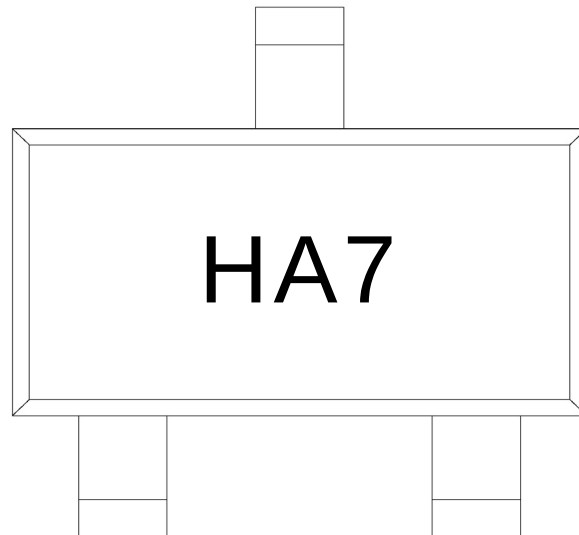


SPT-323

单位: mm



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



H

A7

Note:

H: Company Code

A7: Product Type

Temperature Profile for IR Reflow Soldering(Pb-Free)

- 1

150 180

60 90sec;
- 2

245±5

5±0.5sec;
- 3

2 10 /sec.
- Note:

1.Preheating:150~180 , Time:60~90sec.

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

3. Cooling Speed: 2~10 /sec.

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL

Package Type

Units

Dimension

(unit