

/ Descriptions

Silicon Diode in a SOT-323 Plastic Package.

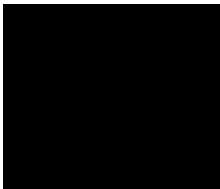
/ Features

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

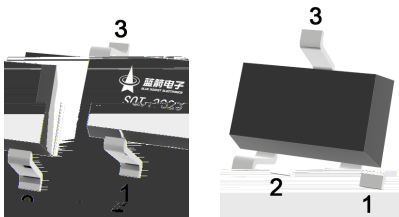
/ Applications

Applications for High-speed switching. surface mounted circuits.

/ Equivalent Circuit



/ Pinning



PIN: See Equivalent Circuit.

/ Marking

Marking	HA7
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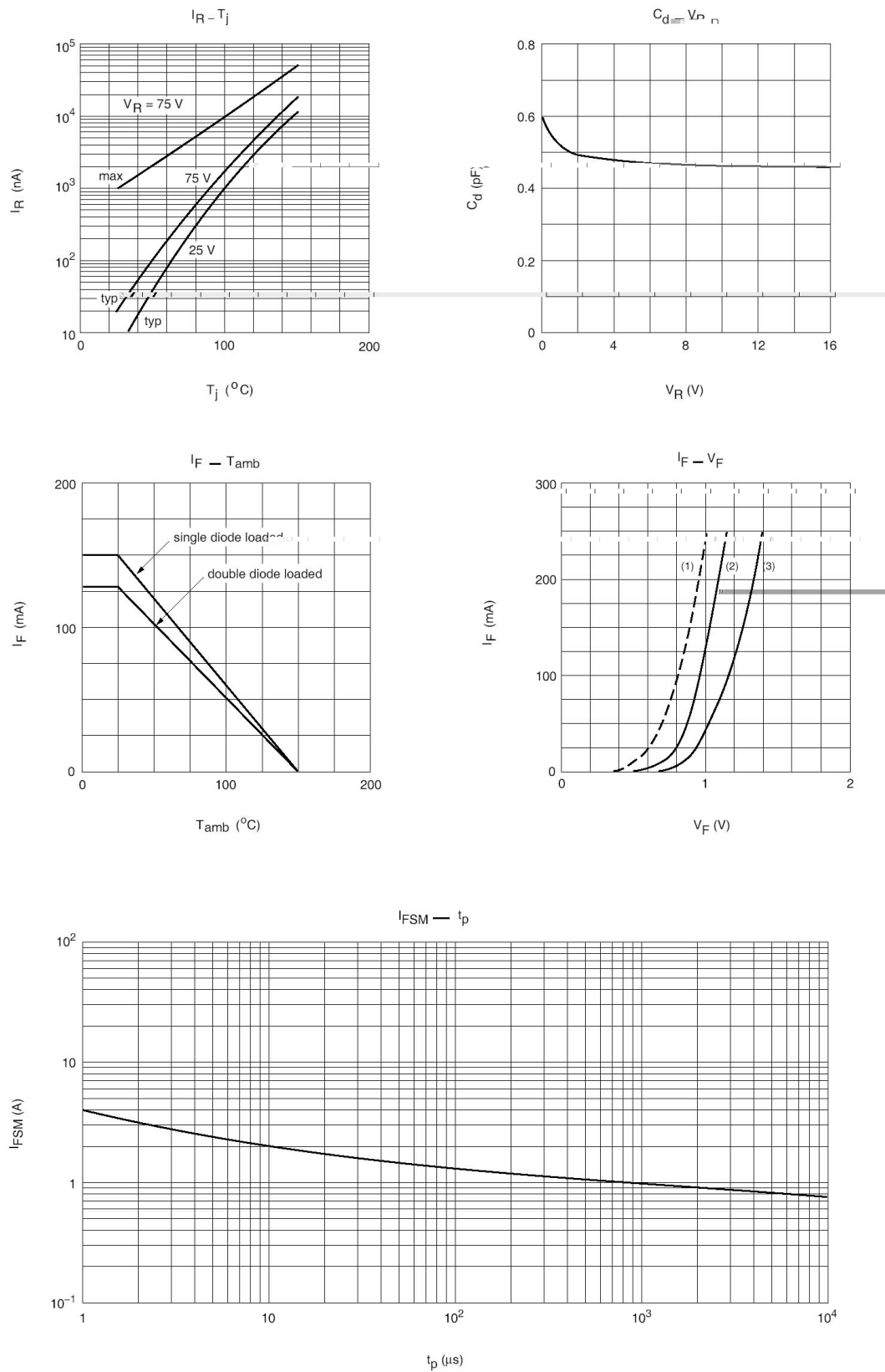
/ Absolute Maximum Ratings(Ta=25)

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	

/ Electrical Characteristics(Ta=25)

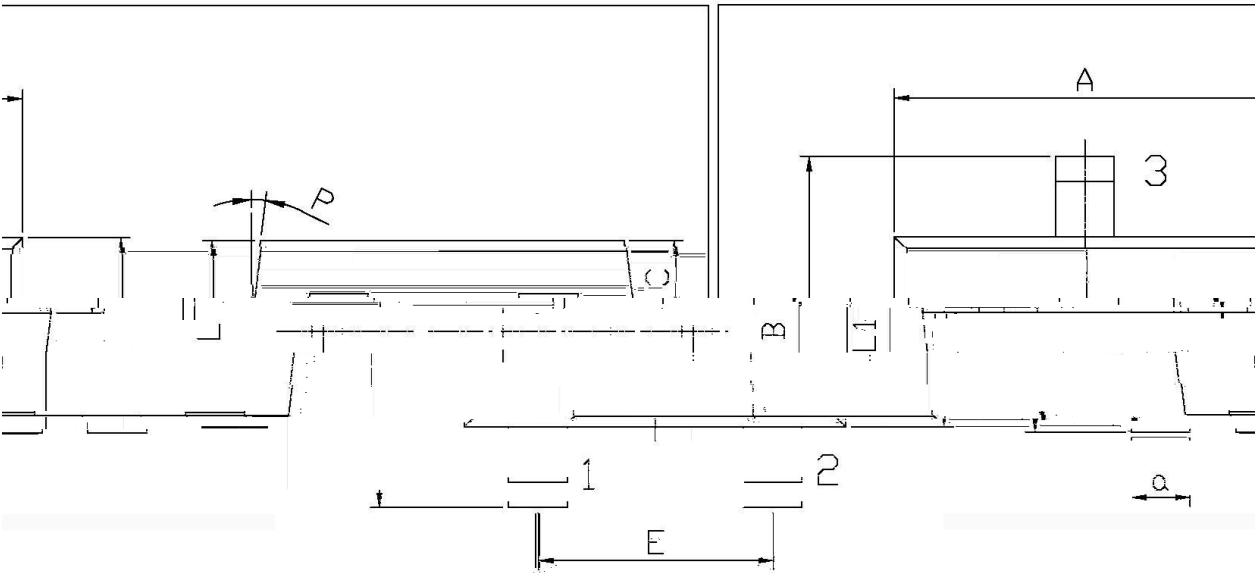
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=1\text{mA}$			715	mV
		$I_F=10\text{mA}$			855	mV
		$I_F=50\text{mA}$			1	V
		$I_F=150\text{mA}$			1.25	V
Instantaneous Reverse Current Total Capacitance	I_R	$V_R=25\text{V}$			30	nA
		$V_R=75\text{V}$			1	μA
		$V_R=25\text{V}$ $T_j=150$			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

/ Electrical Characteristic Curve



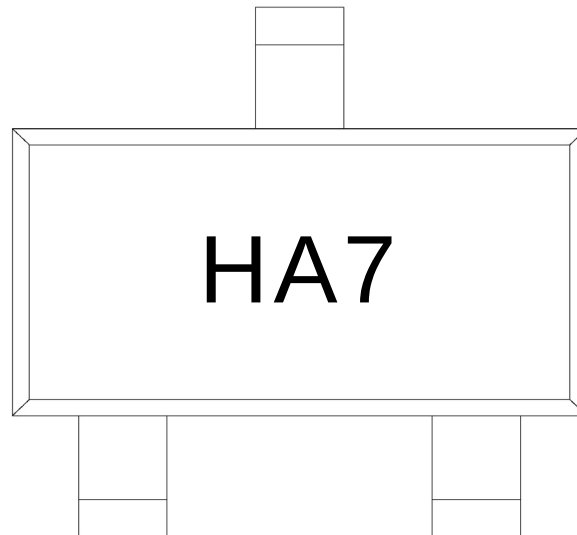
/ Package Dimensions

SOT-323 单位: mm



		Dimensions In Millimeters		Dimensions In Millimeters			
Min.	Max.	Symbol	Min.	Max.	Symbol	Min.	Max.
1.95	2.35	C	0.30	0.50	A		
2.00	2.20	a	0.85	1.20	B		
1.20	1.40	a	0.20	0.40			
1.15	1.35	P	7°				

/ Marking Instructions



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