SOT-323 Silicon Diode in a SOT-323 Plastic Package.

SMD

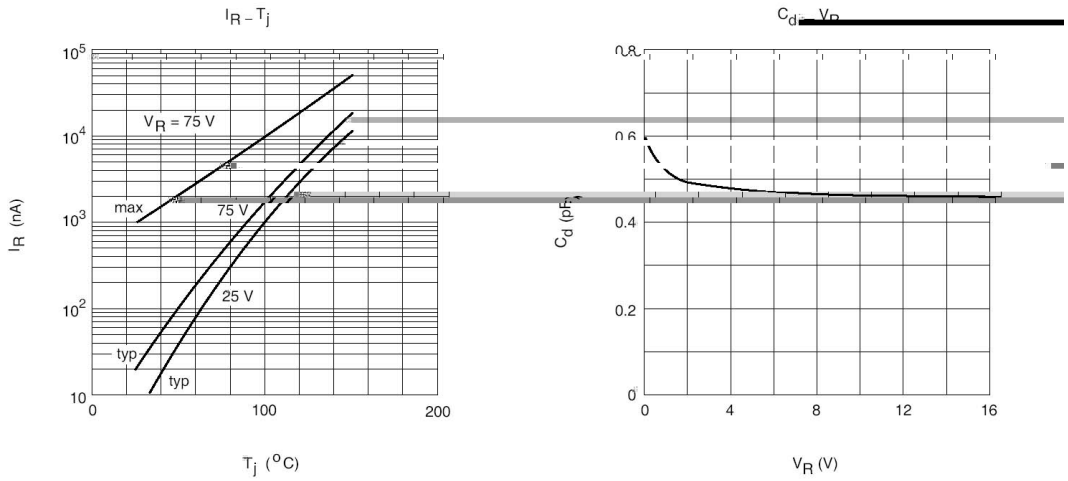
Very small plastic SMD package, High switching speed, High Continuous reverse and Repetitive peak reverse voltage, High Repetitive peak forward current,HF Product.

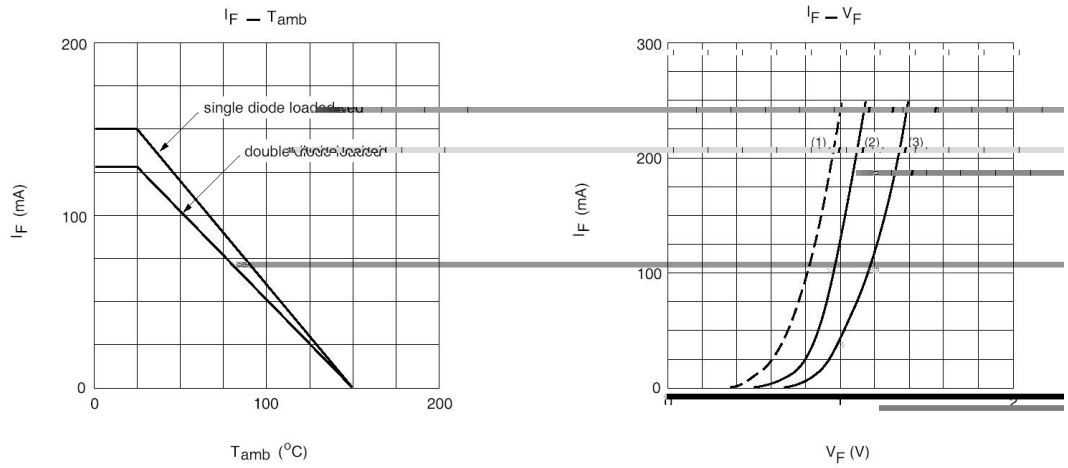
Applications for High-speed switching. surface mounted circuits.

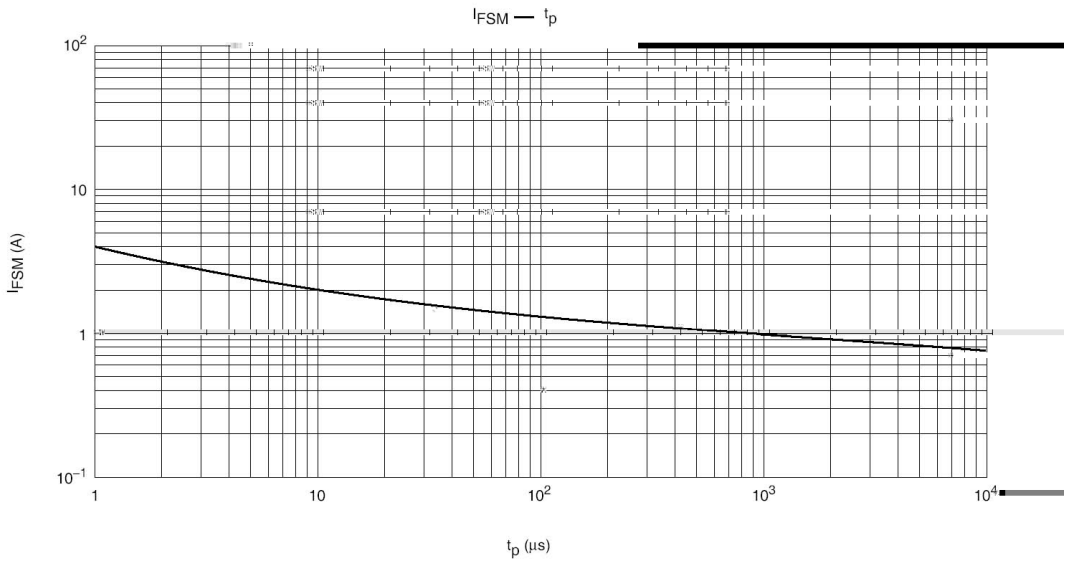
Parameter	Symbol	Rating	Unit
Repetitive Reverse Voltage	V_{RRM}	85	V
Continuous reverse voltage	V_R	75	V
Continuous forward current	$I_{F(1)}$	150	mA
	$I_{F(2)}$	130	mA
Repetitive peak forward current	I_{FRM}	500	mA
Non-repetitive Peak Forward Current	$I_{FSM(1)(t=1\ S)}$	0.5	A
	$I_{FSM(2)(t=1\ mS)}$	1.0	A
	$I_{FSM(3)(t=1\mu S)}$	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=1mA			715	mV
		I_F=10mA			855	mV
		I_F=50mA			1	V
		I_F=150mA			1.25	V
Instantaneous Reverse Current Total Capacitance	I_R	V_R=25V			30	nA
		V_R=75V			1	μA
		V_R=25V T_j=150			30	μA
		V_R=75V T_j=150			50	μA
Diode capacitance	C_d	V_R=0 f=1MHz			1.5	pF
Reverse Recovery Time	t_{rr}	I_R				

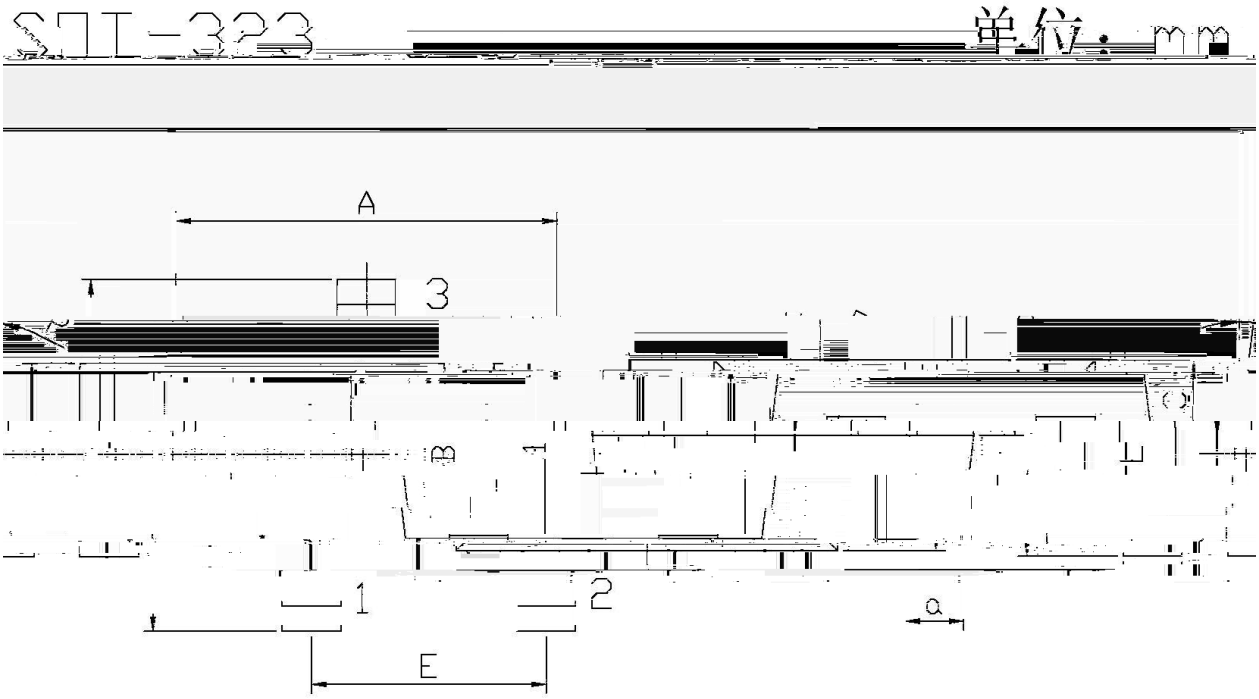
/ Electrical Characteristic Curve

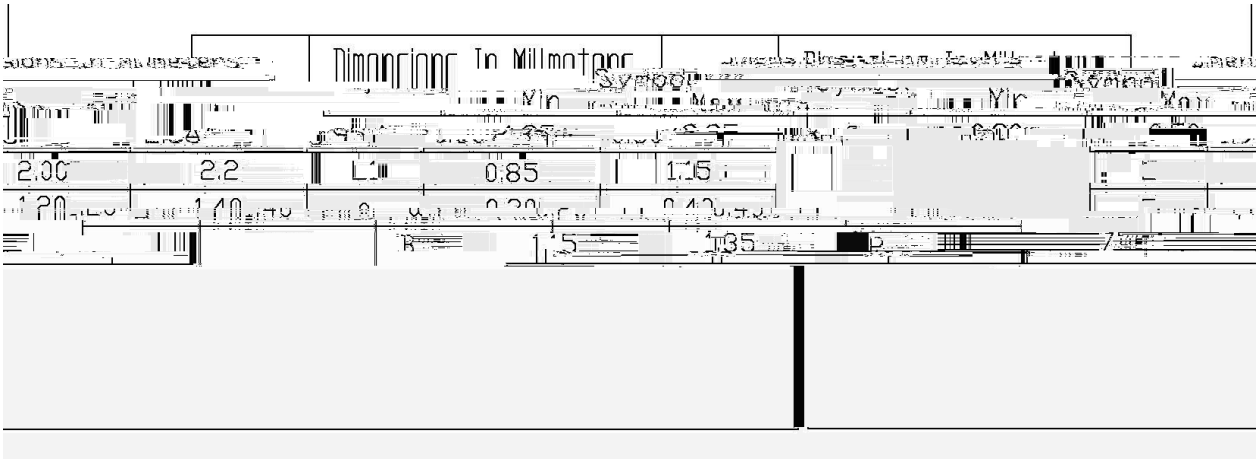




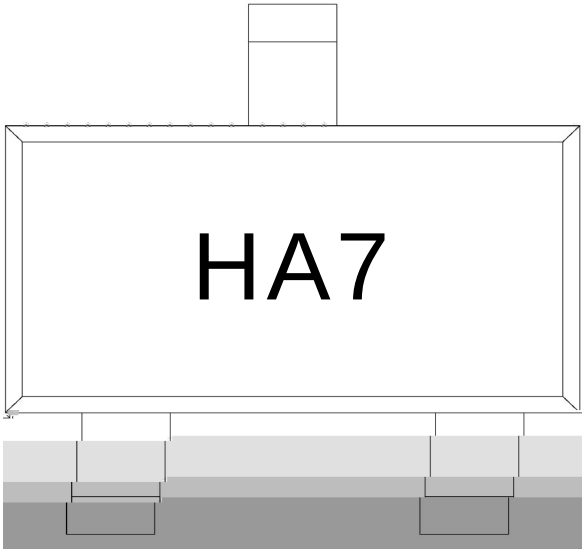


/ Package Dimensions





/ Marking Instructions



H

A7

Note:

H: Company Code

A7: Product Type

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

1 150 180 60 90sec;

2 245±5 5±0.5sec;

3 2 10 /sec.

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

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

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ REEL