

/ Revised record

/ Descriptions

Silicon Diode in a SOT-23 Plastic Package.

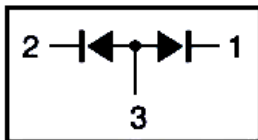
/ Features

Small package, double diode, high switching speed, high repetitive peak reverse voltage, repetitive peak forward current up to 450mA. HF Product.

/ Applications

High-speed switching in thick and thin-film circuits..

/ Equivalent Circuit



/ Pinning



PIN: See Equivalent Circuit.

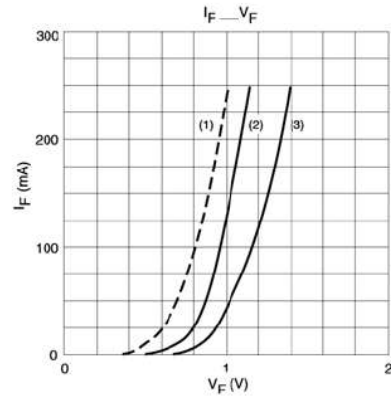
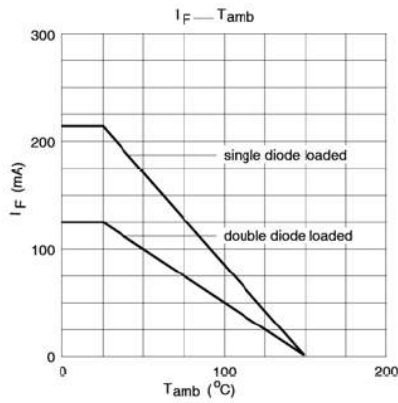
/ hFE Classifications & Marking

Marking	HA1
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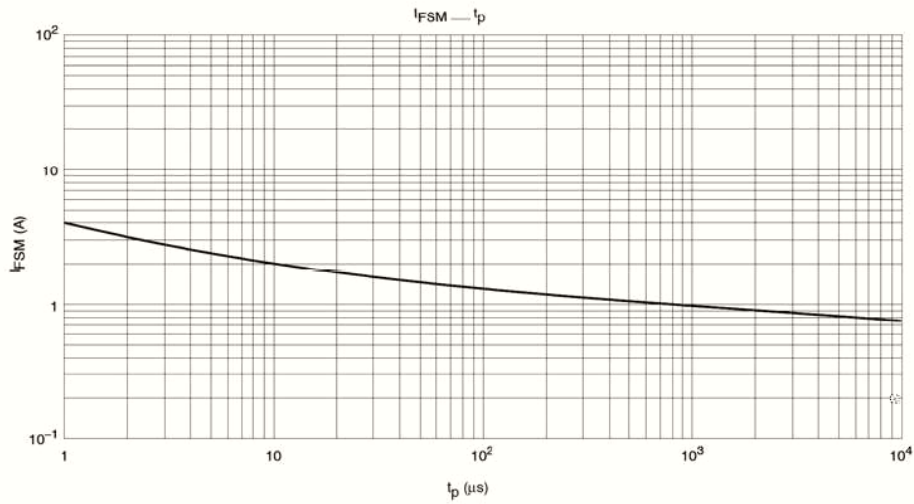
Parameter	Symbol	Rating	Unit
Repetitive Reverse Voltage	V_{RRM}	85	V
Continuous Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_F(\text{single diode loaded})$	215	mA
	$I_F(\text{double diode loaded})$	125	mA
Repetitive Peak Forward Current	I_{FRM}	450	mA
Non-repetitive Forward Surge Current	$I_{FSM(1)}(t=1\mu s)$	4.0	A
	$I_{FSM(2)}(t=1mS)$	1.0	A
		0.5	A

μ

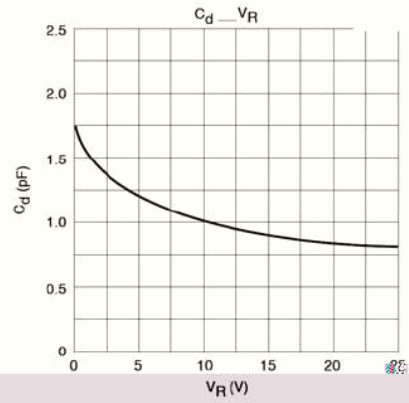
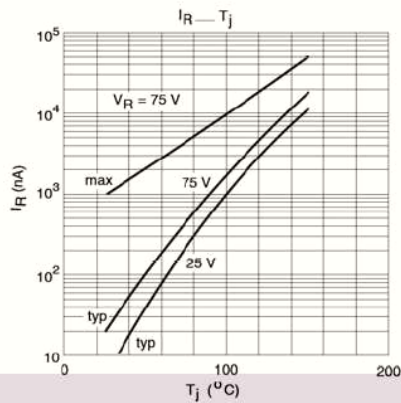
/ **Electrical Characteristic Curve**



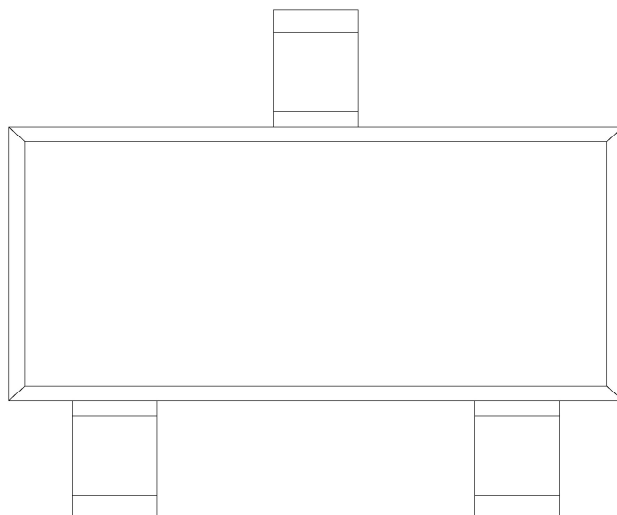
(1) $T_j = 150\text{ }^{\circ}\text{C}$; typical values.
(2) $T_j = 25\text{ }^{\circ}\text{C}$; typical values.
(3) $T_j = 25\text{ }^{\circ}\text{C}$; maximum value



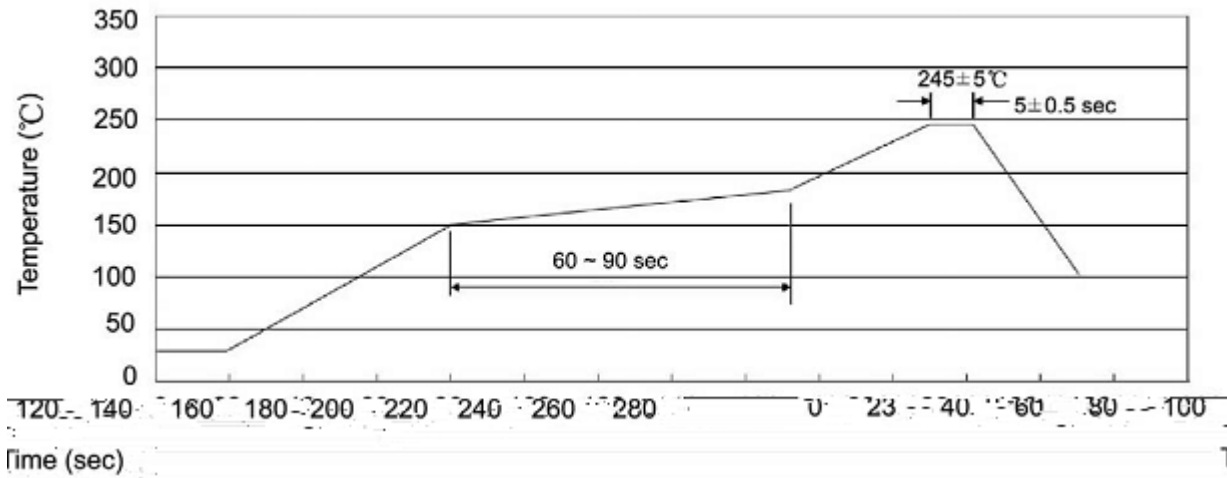
Based on square wave currents.
 $T_j = 25\text{ }^{\circ}\text{C}$ prior to surge.



/ Marking Instructions



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



Note:

- | | | | | | |
|---|-----|-----|----|----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , 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. |

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-23	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

/ Notices