

/ Descriptions

SOT-23

Schottky barrier diodes in a SOT-23 Plastic Package.

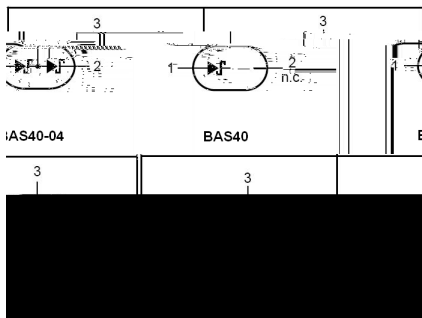
/ Features

Low forward current, Low diode capacitance, small plastic SMD package.

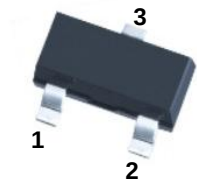
/ Applications

Ultra u-cB-speed switching, voltage clamping, protection circuits.

/ Equivalent Circuit



/ Pinning



PIN: See Equivalent Circuit.

/ h_{FE} Classifications & Marking

Type	BAS40	BAS40-04	BAS40-05	BAS40-06
Marking	H43	H44	H45	H46

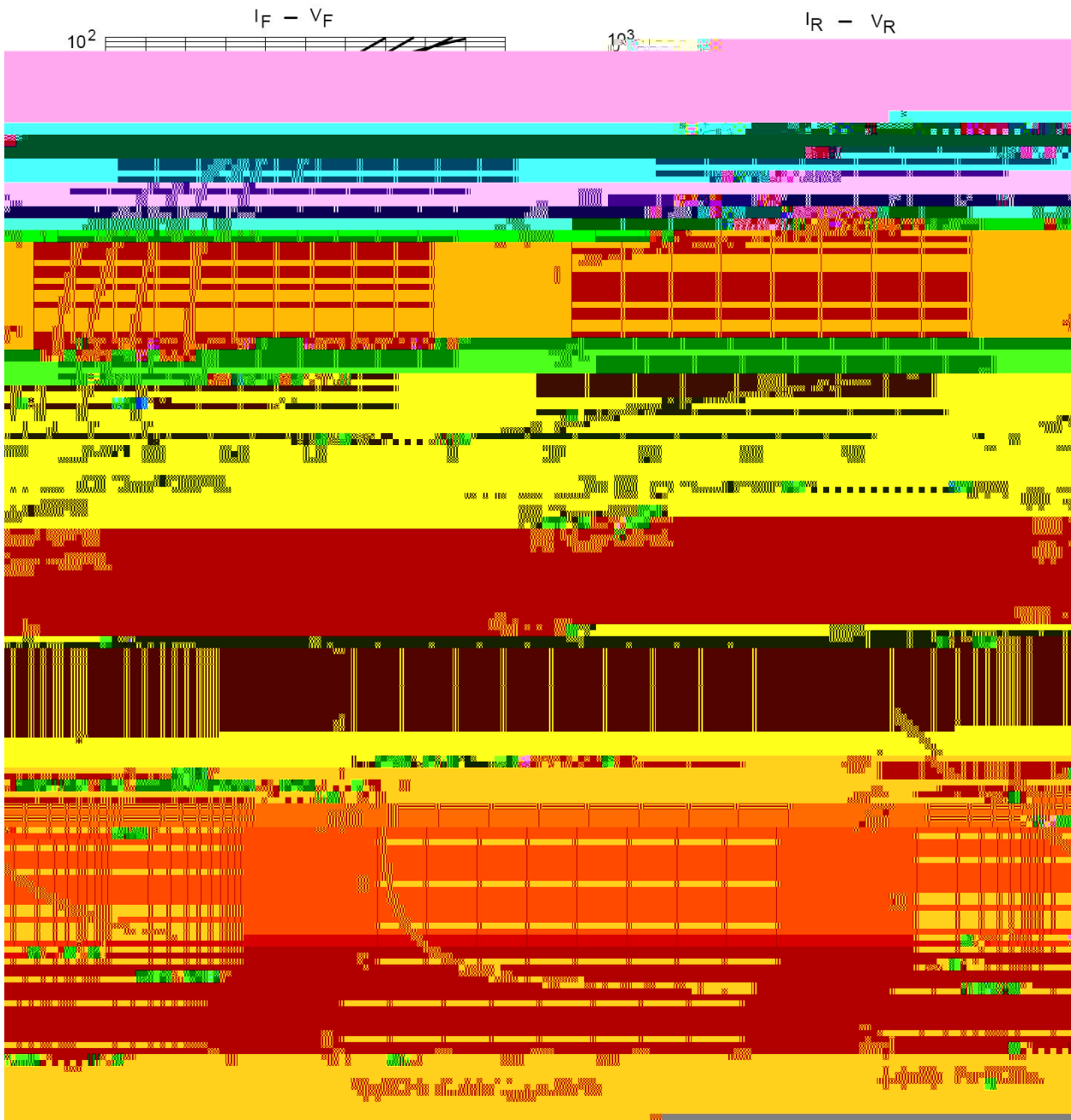
/ Absolute Maximum Ratings(Ta=25)

Para8ster	Symbol	Rating	Unit
Repetitive Reverse Voltage	V_R	40	V
Average Rectified Forward Current	I_F	120	mA
Repetitive Peak Forward Surge Current	$I_{FRM} \quad t_p \leq 1s$	120	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM} \quad t_p < 10ms$	100	mA
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	500	K/W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

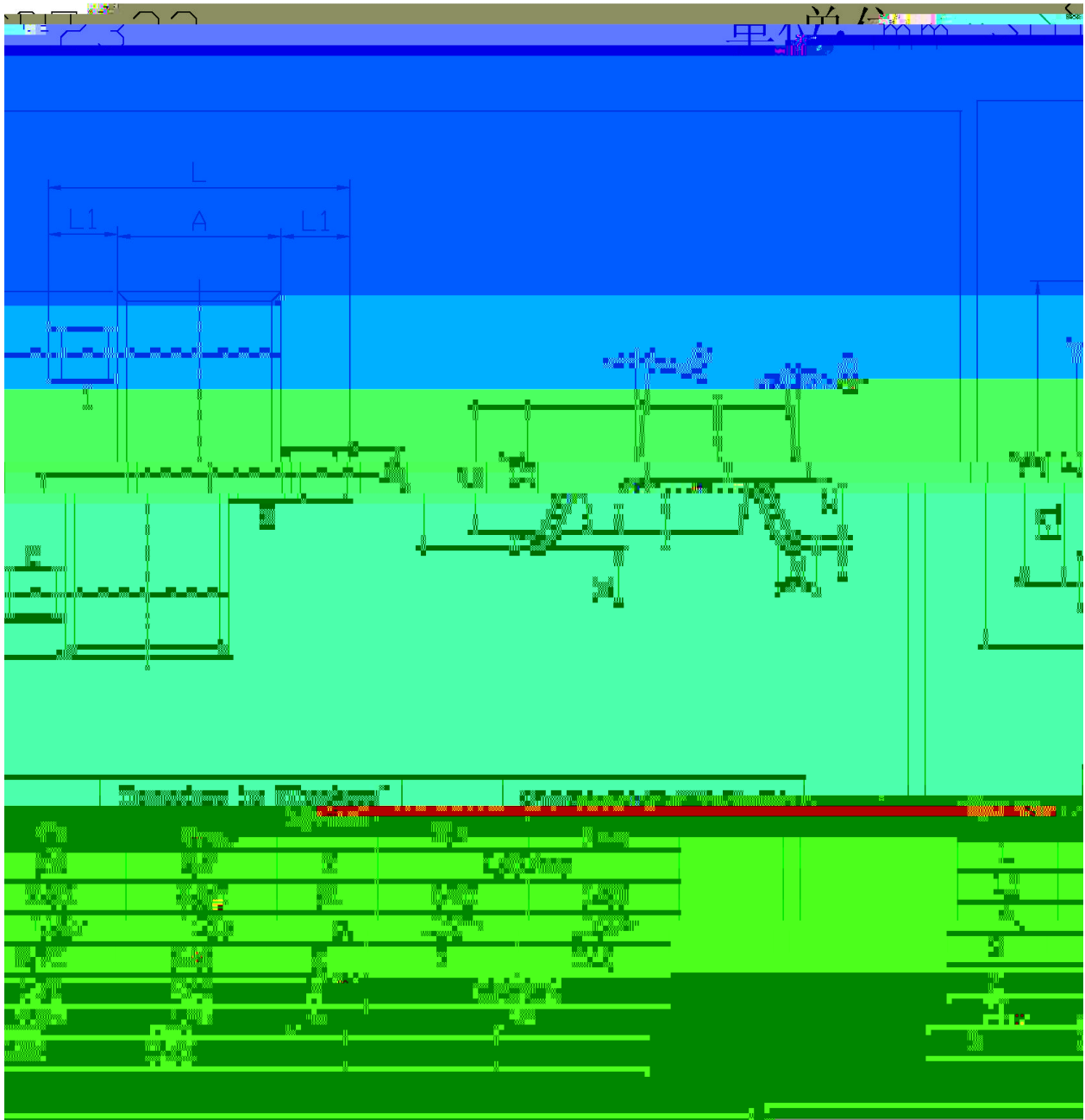
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=1mA$			380	mV
		$I_F=10mA$			500	mV
		$I_F=40mA$			1.0	V
Instantaneous Reverse Current	I_R	$V_R=30V$			1.0	μA
		$V_R=40V$			10	μA
Diode Capacitance	C_d	$V_R=0 \quad f=1MHz$			5	pF

/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



H

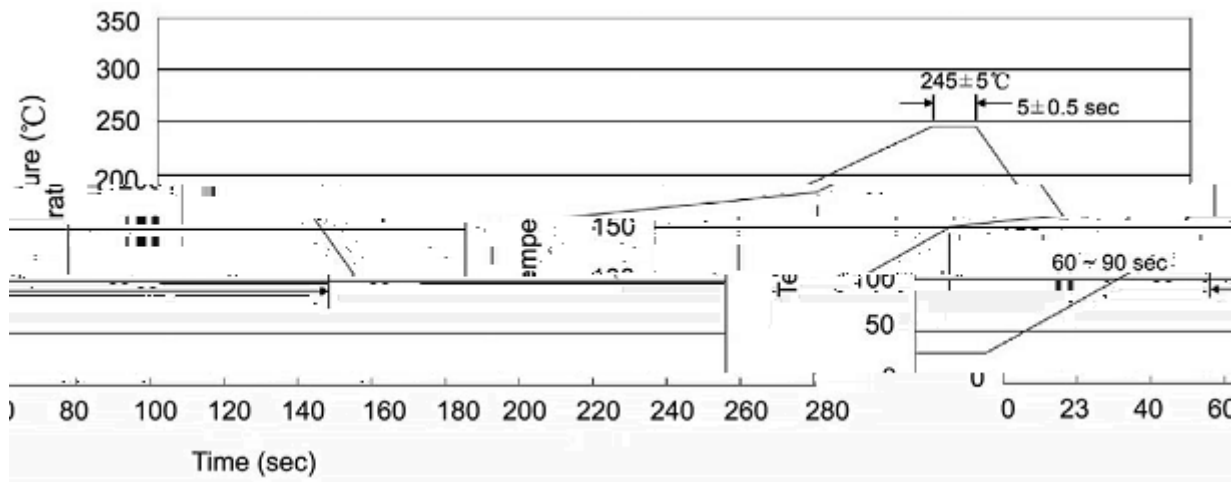
43

Note:

H: Company Code.

43: Product Type.

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



Note:

- 1

25 150

60 90sec;
- 2

245±5

5±0.5sec;
- 3

2 10 /sec.
- 1.Preheating:25~150 , 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

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT-23	3,000	10	30,000	8	240,000	7 ×8	180×120×180	385×257×392

/ Notices