/ Descriptions

SOT-23 Schottky barrier diodes in a SOT-23 Plastic Package.

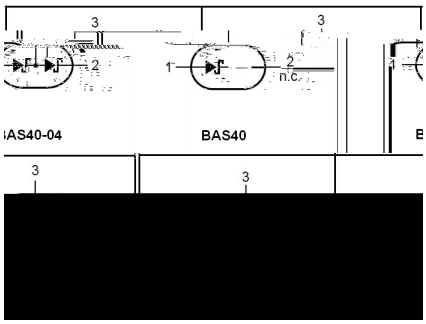
/ Features

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

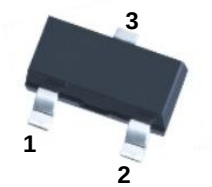
/ Applications

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

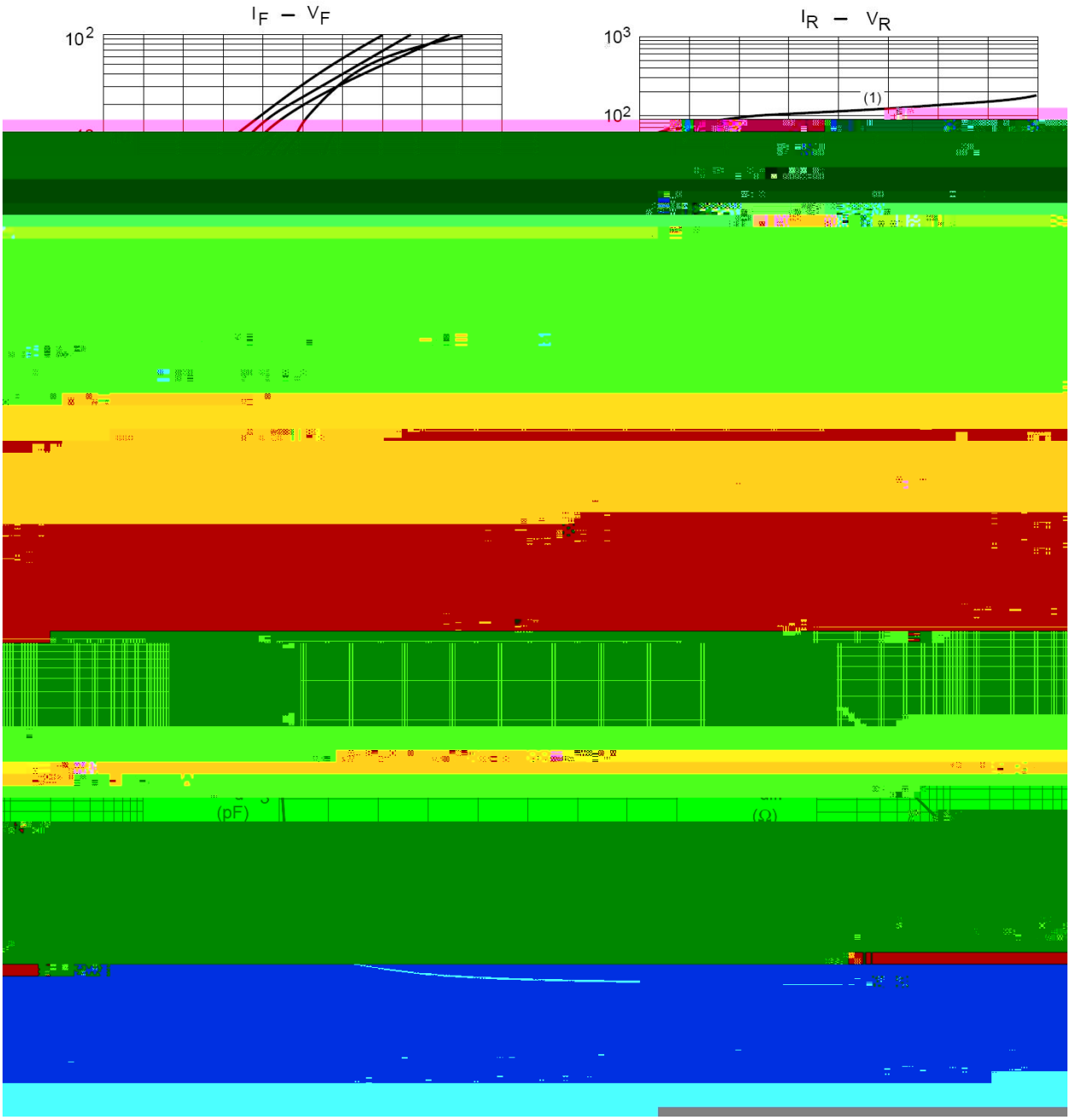
/ Absolute Maximum Ratings(Ta=25)

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} t_p 1s	120	mA
Non-repetitive Peak Forward Surge Current	I_{FSM} 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	

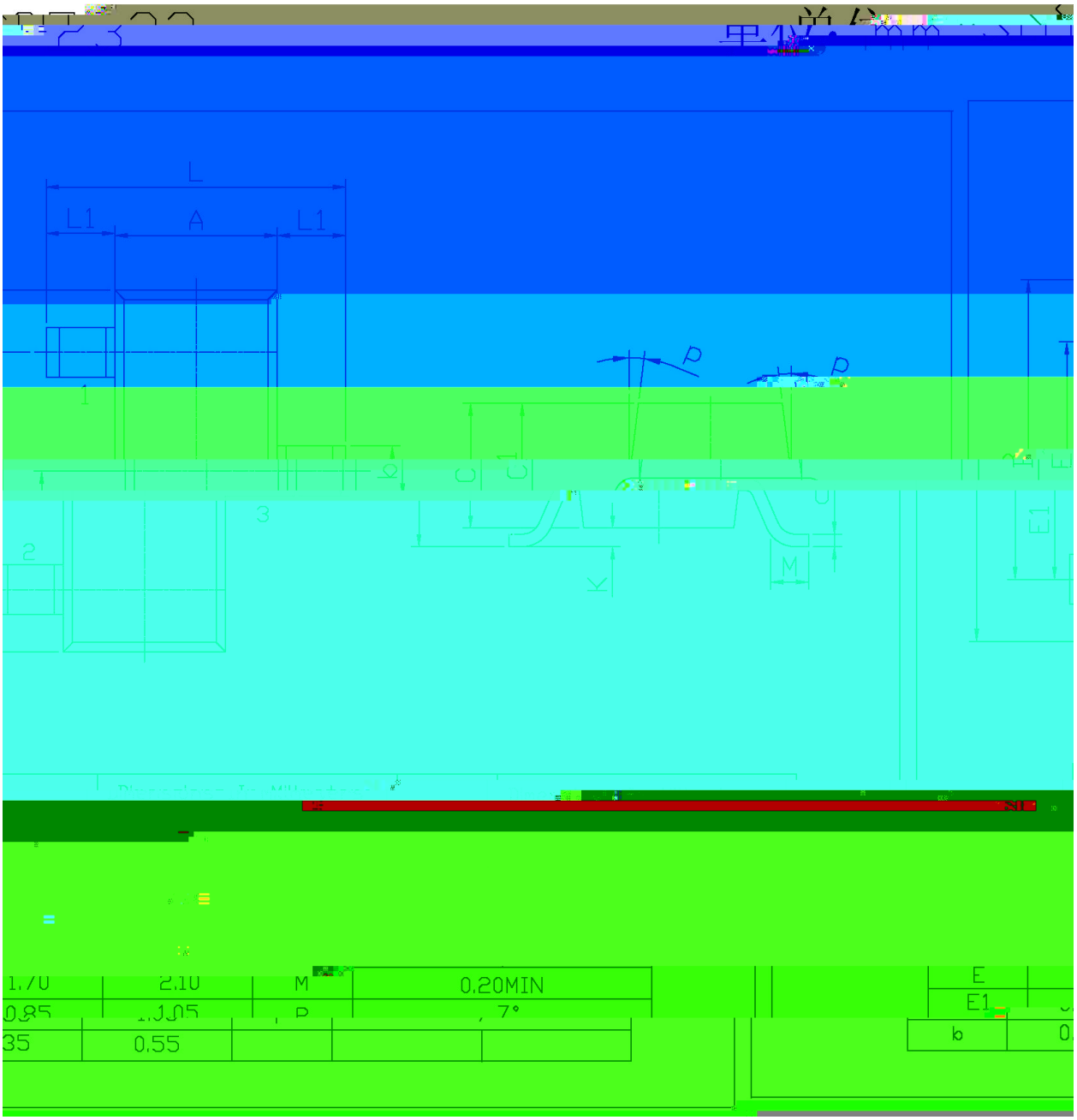
/ Electrical Characteristics(Ta=25)

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 f=1MHz			5	pF

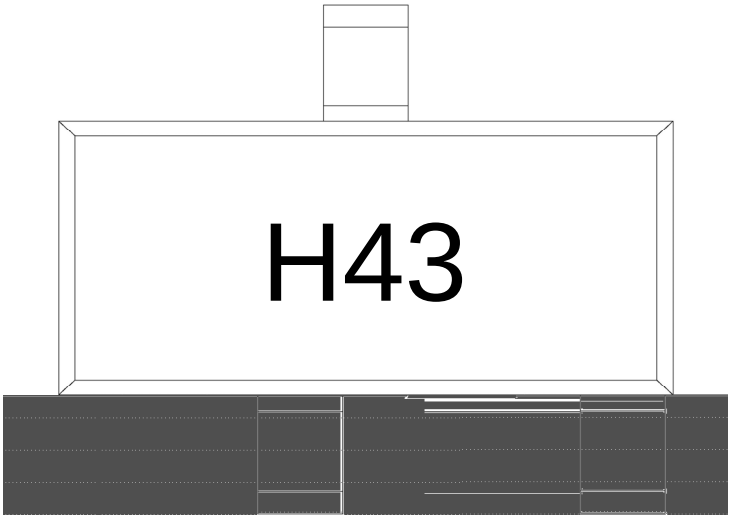
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



H

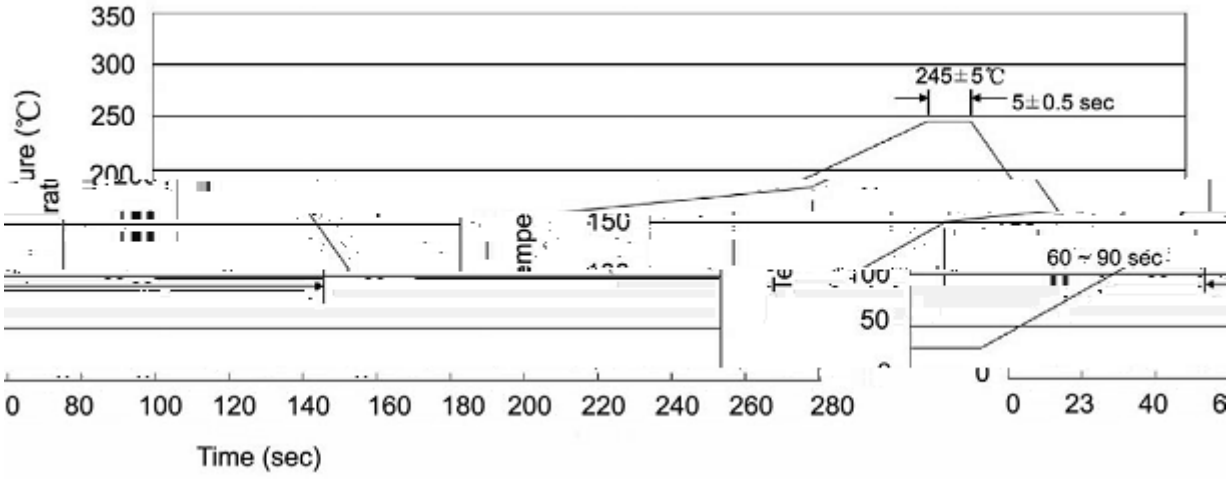
43

Note:

H: Company Code.

43: Product Type.

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



				Note:	
1	25	150	60 90sec;	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	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