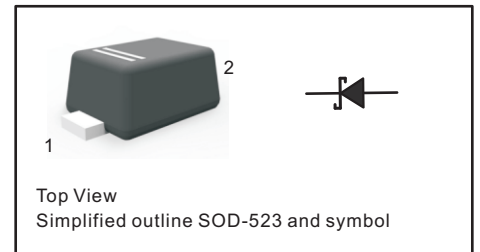


SCHOTTKY BARRIER RECTIFIERS
FEATURES

- Low Forward Voltage Drop
- Surface Mount Package Ideally Suited for Automated Insertion
- Lead, Halogen and Antimony Free, RoHS Compliant "Green" Device

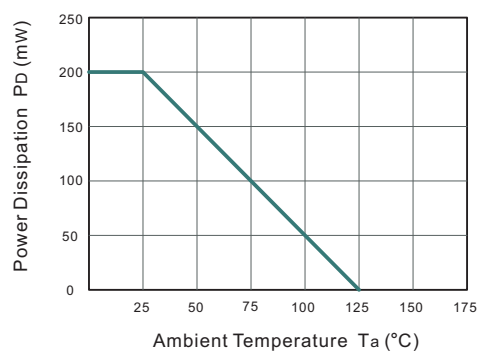
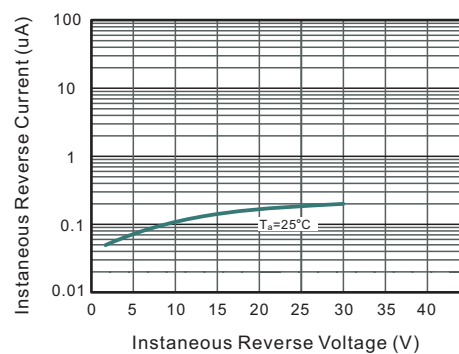
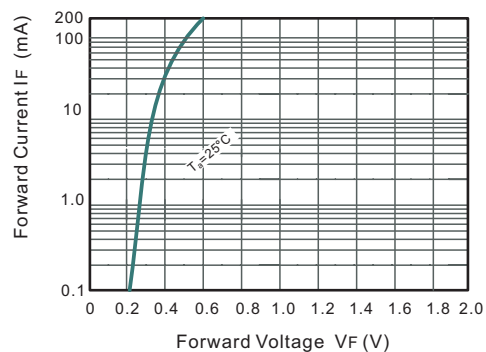
PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



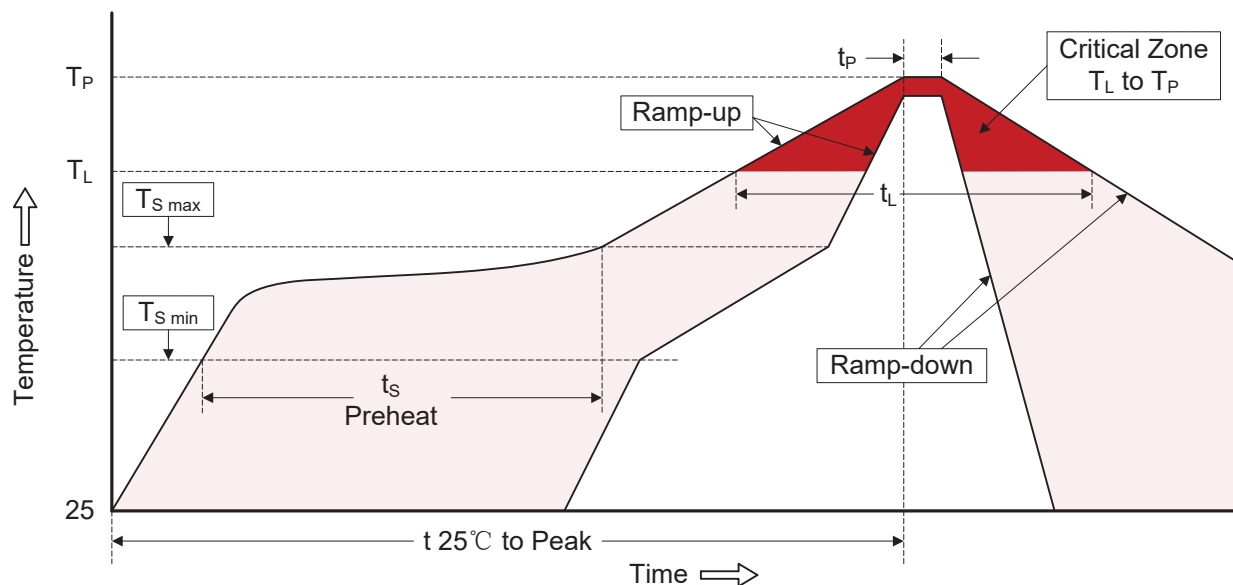
Maximum Ratings and Electrical characteristics
Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	RB520S-30	Units
Reverse Voltage	V_R	30	V
Forward Continuous Current	I_F	200	mA
Non-Repetitive Peak Forward Surge Current @t = 8.3ms	I_{FSM}	1	A
Power dissipation	P_D	200	mW
Reverse Breakdown Voltage $I_R = 500\mu A$	V_{BR}	30(Min)	V
Forward Voltage $I_F = 200mA$	V_F	0.60(Max)	V
Peak Reverse Current $V_R = 10V$	I_R	1.0(Max)	μA
Junction Temperature	T_j	125	°C
Storage Temperature	T_{stg}	-55 ~ +125	°C
Diode Capacitance $V_R = 4V, f = 1.0MHz$	C_D	45	pF

Fig.1 Power Derating Curve

Fig.2 Typical Instantaneous Reverse Characteristics

Fig.3 Typical Forward Characteristic


Recommended Soldering Conditions

Reflow Soldering



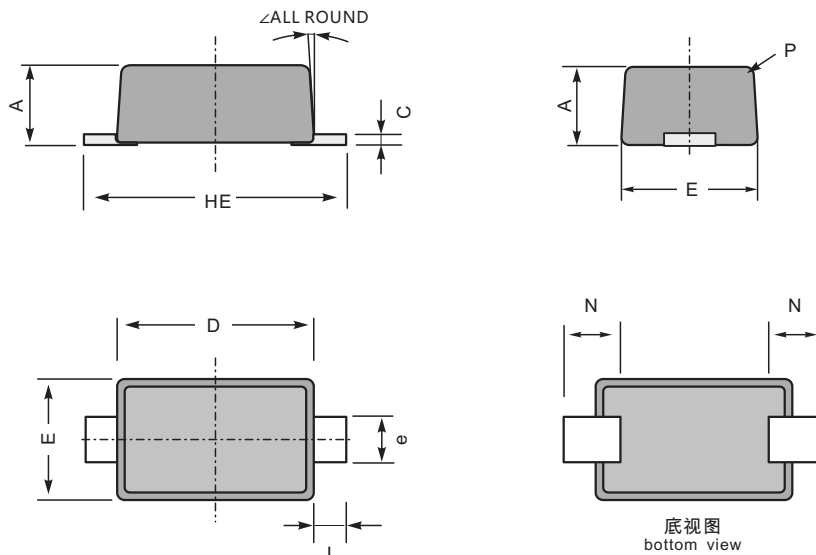
Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to T_P)	3°C/second max.
Preheat -Temperature Min ($T_{S\ min}$) -Temperature Max ($T_{S\ max}$) -Time (min to max) (t_s)	150°C 200°C 60-180 seconds
$T_{S\ max}$ to T_L -Ramp-up Rate	3°C/second max.
Time maintained above: -Temperature (T_L) -Time (t_L)	217°C 60-150 seconds
Peak Temperature (T_P)	260°C
Time within 5°C of actual Peak Temperature (t_p)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

PACKAGE OUTLINE

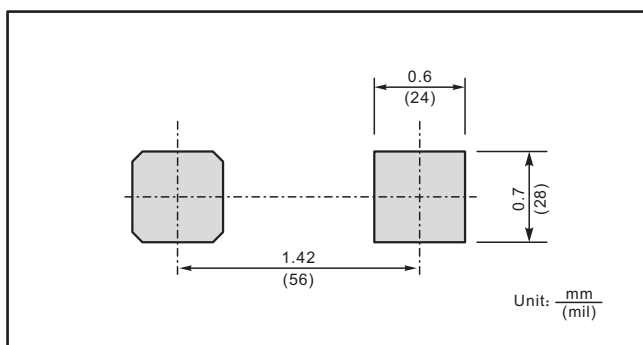
Plastic surface mounted package; 2 leads

SOD-523



UNIT		A	e	C	D	E	HE	N	L	P	<
mm	max	0.77	0.35	0.15	1.30	0.99	1.70	0.35	0.2	R0.1	10° ±1°
	min	0.51	0.25	0.08	1.10	0.75	1.50	ref	ref	ALL ROUND	
mil	max	30	14	6	51	39	67	14	8.0	R4.0	
	min	20	10	3	43	30	59	ref	ref	ALL ROUND	

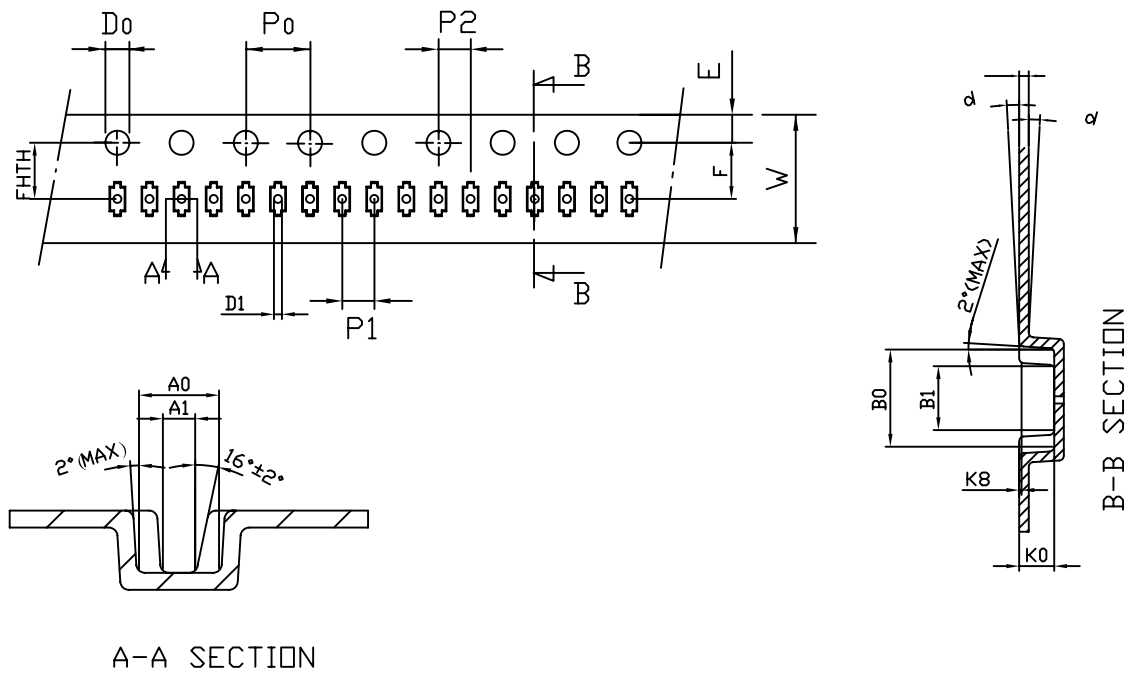
The recommended mounting pad size



Marking

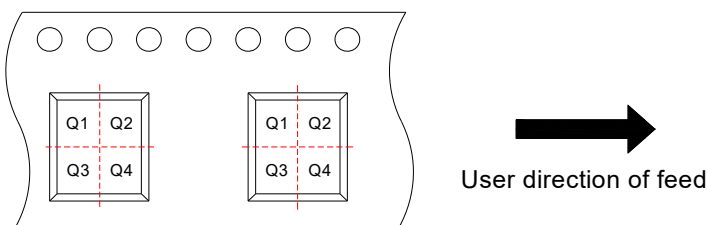
Part Number	Marking	Quantity Per Reel	Reel Size
RB520S-30X	B	3,000	7 Inch

Tape and Reel Specification



unit:mm

symbol	A0	B0	K0	P0	P1	P2	A1	T
Spec	0.90±0.05	1.95±0.05	0.73±0.05	4.0±0.10	2.0±0.05	2.0±0.05	0.39±0.05	0.20±0.02
symbol	E	F	D0	D1	B2	W	10P0	K8
Spec	1.75±0.10	3.50±0.05	1.50 ^{+0.10} ₋₀	0.50±0.05	1.40±0.05	8.0 ^{+0.3} _{-0.1}	40.0±0.10	0.15MAX
symbol	FHTH							
Spec	3.50±0.05							



Pin 1 quadrant:Q1&Q2