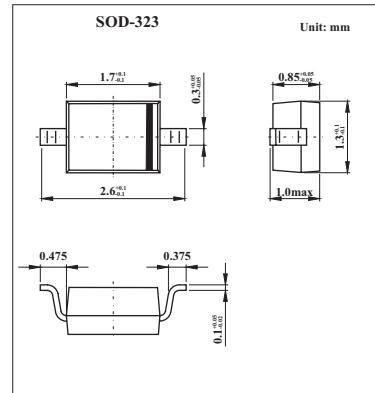


Schottky Diodes

BAS170WS

■ Features

- Schottky diode for high-speed switching
- Circuit protection
- Voltage clamping
- High-level detecting and mixing



■ Absolute Maximum Ratings Ta = 25°C

PARAMATER	SYMBOL	TEST CONDITION	VALUE	UNIT
Repetitive peak reverse voltage	V _{RM}		70	V
Forward continuous current	I _F	T _{amb} = 25 °C	70	mA
Surge forward current	I _{FSM}	t _p < 1 s, T _{amb} = 25 °C	600	mA
Power Dissipation ⁽¹⁾	P _{tot}	T _{amb} = 25 °C	200	mW
Thermal resistance junction to ambient air ⁽¹⁾	R _{θJA}		650	°C/W
Junction temperature	T _j		150	°C
Operating temperature range	R _{amb}		-55 to +125	°C
Storage temperature range	T _s		-55 to +125	°C

1.valid provided that electrodes are kept at ambient temperature

■ Electrical Characteristics Ta = 25°C

PARAMATER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Reverse breakdown voltage	V _{(BR)R}	I _R = 10 μ A(Pulse)	70			V
Leakage current	I _R	V _R = 50 V			0.1	μ A
		V _R = 70 V			10	μ A
Forward voltage	V _F	I _F = 200 mA		375	410	V
		I < tief < F = 10 mA		705	750	V
Forward voltage ⁽¹⁾	V _F	V _F = 15 mA		880	1000	mV
Capacitance	C _{tot}	V _R = 0 V, f = 1 MHz		1.5	2	pF
Charge carrier lifetime	t	I _F = 25 mA;		100		ps
Differential forward resistance	R _F	I _E = 5 mA; f = 10 kHz		34		Ω

Note:

1.Pulse test: t_p ≤ 300 μ s

■ Marking

Marking	73
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