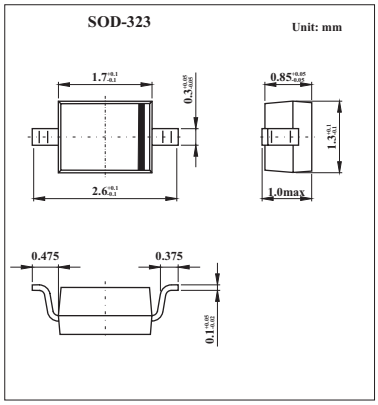
Schottky Diodes

BAS170WS



Features

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

Absolute Maximum Ratings Ta = 25℃

PARAMATER	SYMBOL	TEST CONDITION	VALUE	UNIT
Repetitive peak reverse voltage	V_{RM}		70	V
Forward continuous current	I_F	T_{amb} = 25 ℃	70	mA
Surge forward current	I_{FSM}	t_p < 1 s, T_{amb} = 25 ℃	600	mA
Power Dissipation (1)	P_{tot}	T_{amb} = 25 ℃	200	mW
Thermal resistance junction to ambient air(1)	$R_{\theta JA}$		650	℃/W
Junction temperature	T_j		150	℃
Operating temperature range	R_{amb}		-55 to+125	℃
Storage temperature range	Ts		-55 to+125	℃

1.valid provided that electrodes are kept at ambient temperature

Electrical Characteristics Ta = 25℃

PARAMATER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	I_R = 10 μA(Pulse)	70			V
Leakage current	I_R	V_R =50 V			0.1	μA
		V_R =70 V			10	μA
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: tp ⩽ 300 μs

Marking

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