



FEATURES

- Low leakage current
- Fast Switching Time
- Low capacitance
- Small SMD plastic packages

APPLICATIONS

- High-speed switching
- General-purpose switching

Absolute Maximum Ratings at 25°C

Parameter	Symbols	BAS516WT	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	75	V
Continuous Forward Current	I_F	250	mA
Non-reptitive Peak Forward Surge Current	I_{FSM}	0.5 1 4	A
		at 1s	
		at 1ms	
		at 1us	
Total Power Dissipation	P_{tot}	300	mW
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbols	BAS516WT	Units
Reverse Breakdown Voltage at $I_R=1\mu\text{A}$	$V_{(BR)R}$	100	V
Maximum Forward Voltage	V_F	0.715 0.855 1.00 1.25	V
		at 1 mA	
		at 10 mA	
		at 50 mA	
		at 150 mA	
Peak Reverse Current	I_R	0.03 0.5 30 50	μA
		at $V_R=25\text{V}$ $T_j=25^\circ\text{C}$	
		at $V_R=80\text{V}$ $T_j=25^\circ\text{C}$	
		at $V_R=25\text{V}$ $T_j=150^\circ\text{C}$	
		at $V_R=80\text{V}$ $T_j=150^\circ\text{C}$	
Typical Junction Capacitance $f=1\text{MHz}, V_R=0\text{V}$	C_j	1	pF
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr}	4	ns

(1) Measured with $I_F=10\text{mA}, I_R=0.1\text{mA}, R_F=100\Omega$

Typical Characteristics

Fig.1 Power Derating Curve

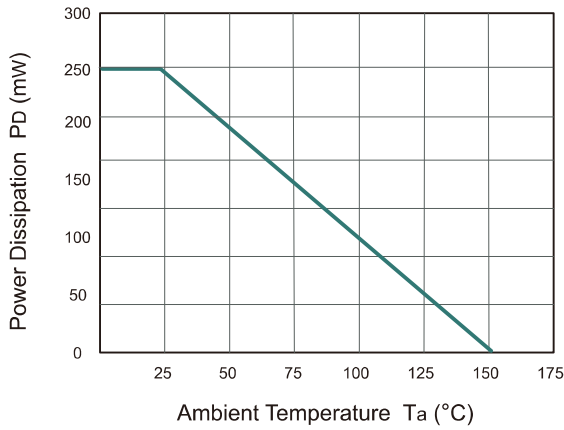


Fig.2 Typical Instantaneous Reverse Characteristics

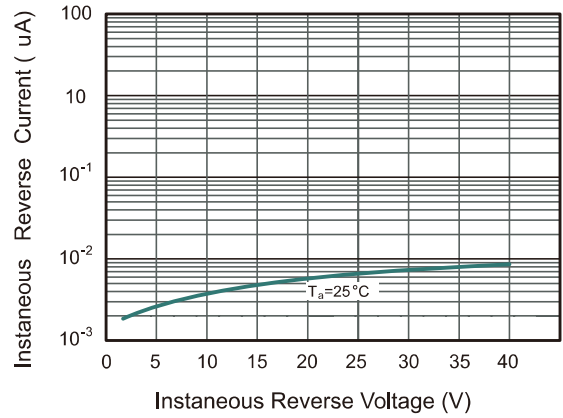


Fig.3 Typical Forward Characteristic

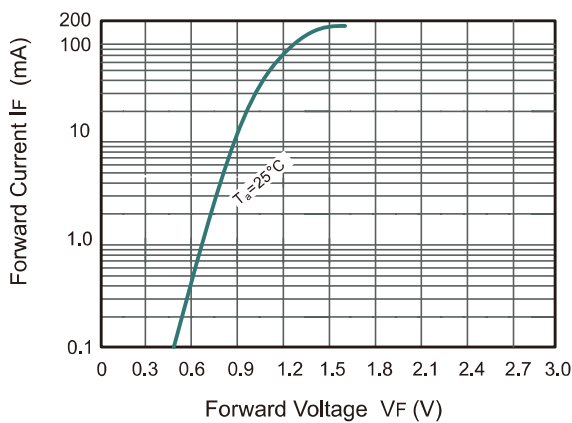
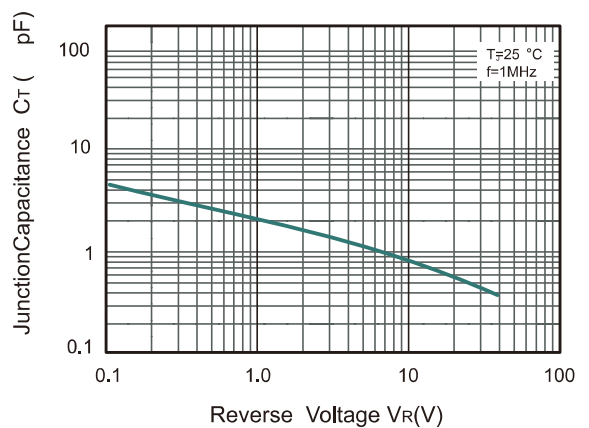


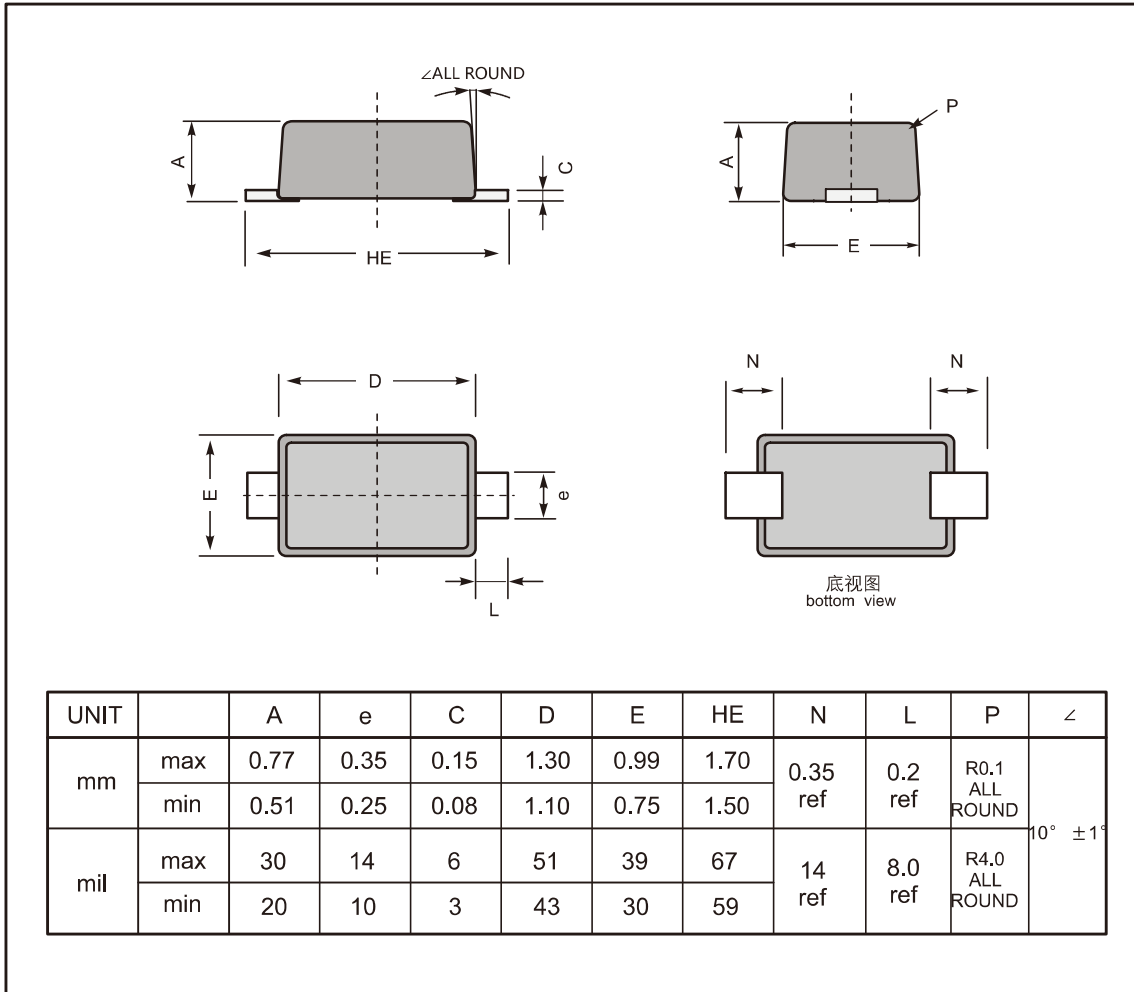
Fig.4 Typical Junction Capacitance



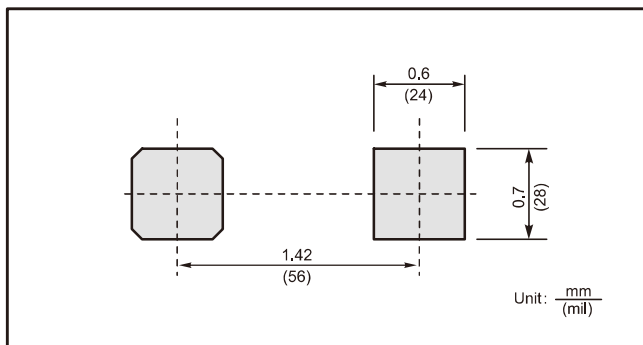
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



The recommended mounting pad size



Marking

Type number	Marking code
BAS516WT	516