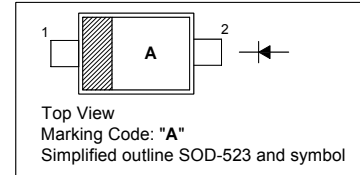


BAS216WT

Silicon Epitaxial Planar Switching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

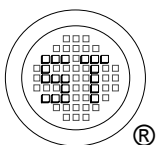


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit	
Repetitive Peak Reverse Voltage	V_{RRM}	85	V	
Reverse Voltage	V_R	75	V	
Continuous Forward Current	I_F	250	mA	
Repetitive Peak Forward Current	I_{FRM}	500	mA	
Non-Repetitive Peak Forward Surge Current	I_{FSM}	at $t = 1\text{ }\mu\text{s}$ at $t = 1\text{ ms}$ at $t = 1\text{ s}$	4 1 0.5	A
Power Dissipation		P_{tot}	150	mW
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$	

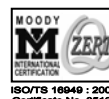
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit			
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$	V_F	715 855 1000 1250	mV			
Reverse Current at $V_R = 25\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 25\text{ V}, T_J = 150\text{ }^\circ\text{C}$ at $V_R = 75\text{ V}, T_J = 150\text{ }^\circ\text{C}$		I_R		30 1 30 50	nA μA μA μA	
Diode Capacitance at $V_R = 0\text{ V}, f = 1\text{ MHz}$				C_{tot}	1.5	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$ to $I_R = 10\text{ mA}, I_R = 1\text{ mA}, R_L = 100\text{ }\Omega$				t_{rr}	4	ns



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ISO/TS 16949 : 2002
Certificate No. 08103

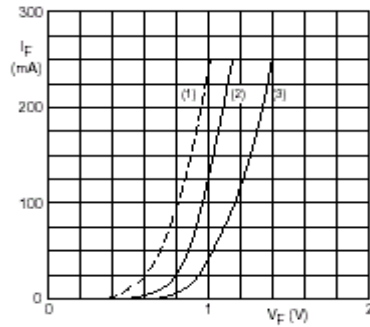
ISO 14001:2004
Certificate No. 7116

ISO 9001:2000
Certificate No. 080808

BS-OHSAS 18001: 2007
Certificate No. 7116

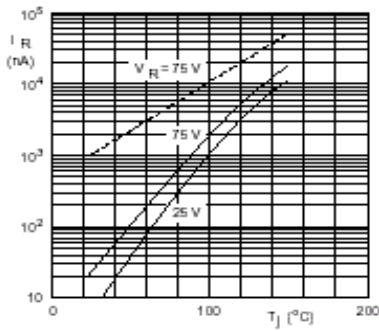
IECQ QC 080000
Certificate No. 7116

BAS216WT



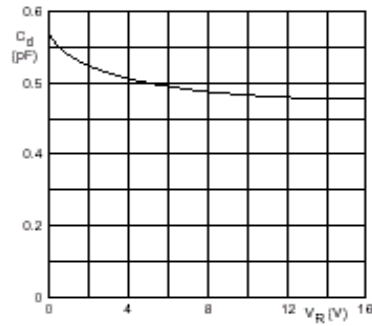
- (1) $T_j = 150\text{ }^\circ\text{C}$; typical values.
- (2) $T_j = 25\text{ }^\circ\text{C}$; typical values.
- (3) $T_j = 25\text{ }^\circ\text{C}$; maximum values.

Forward current as a function of forward voltage.



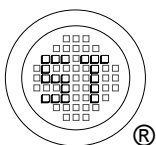
Dotted line: maximum values.
Solid lines: typical values.

Reverse current as a function of junction temperature.

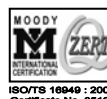


$f = 1\text{ MHz}$; $T_j = 25\text{ }^\circ\text{C}$.

Diode capacitance as a function of reverse voltage; typical values.



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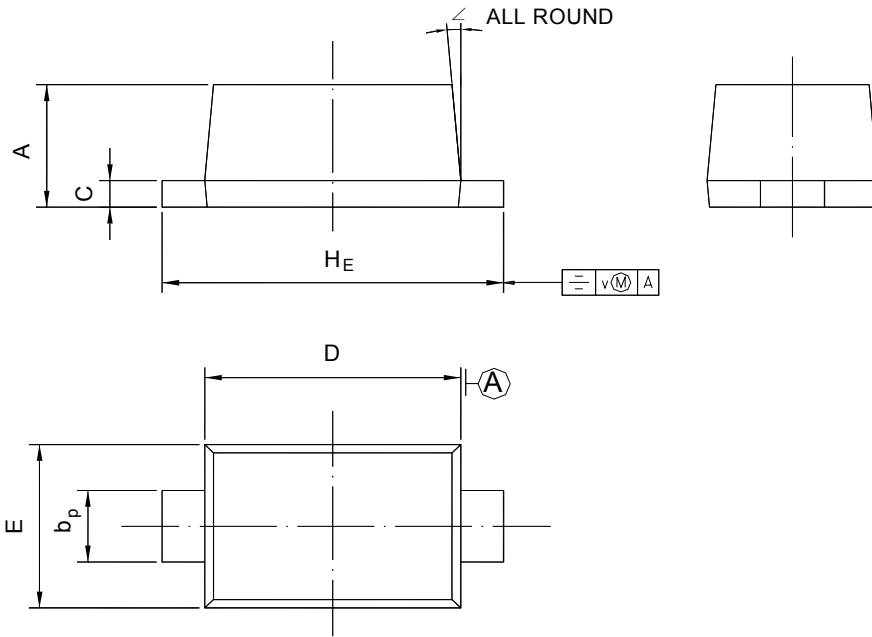
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Certificate No. 050059

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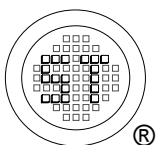
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

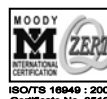
SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.127	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°



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Dated : 15/06/2009