

BAS16P

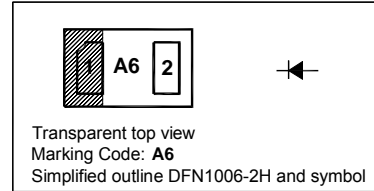
Silicon Epitaxial Planar Switching Diode

Features

- Fast switching speed
- Ultra-small surface mount package
- For general purpose switching applications
- High conductance

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

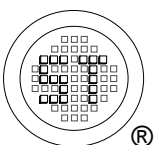


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Forward Continuous Current	I_{FM}	300	mA
Non-Repetitive Peak Forward Current $t = 1 \mu\text{s}$ $t = 1 \text{ s}$	I_{FSM}	2 1	A
Power Dissipation	P_{tot}	250	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	$^\circ\text{C}$

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

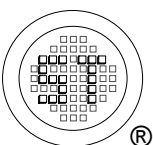
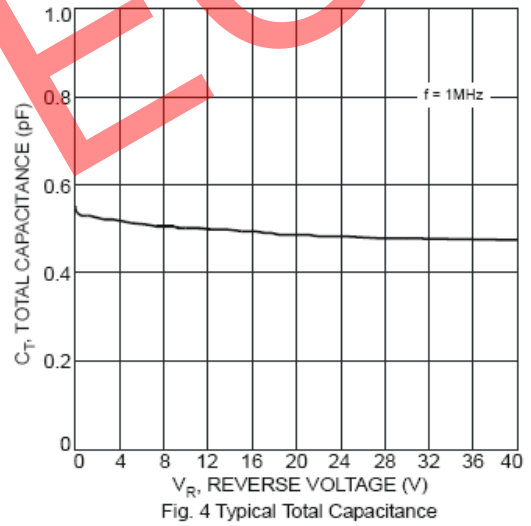
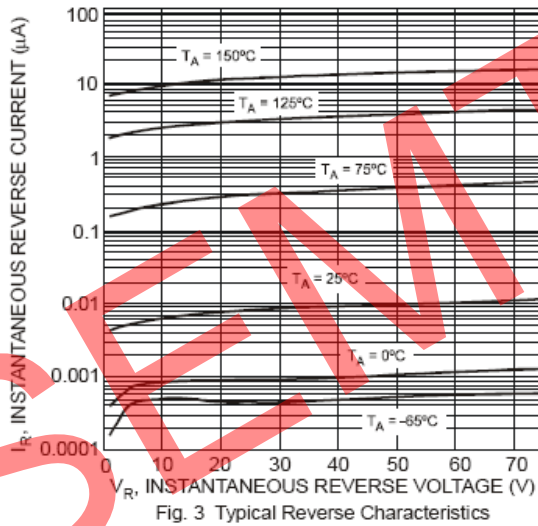
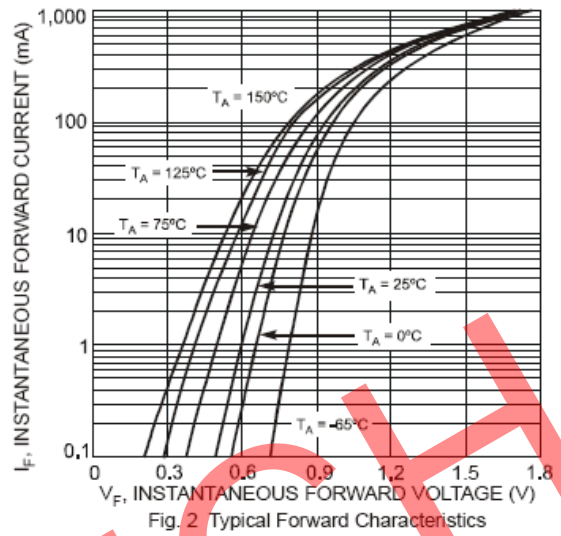
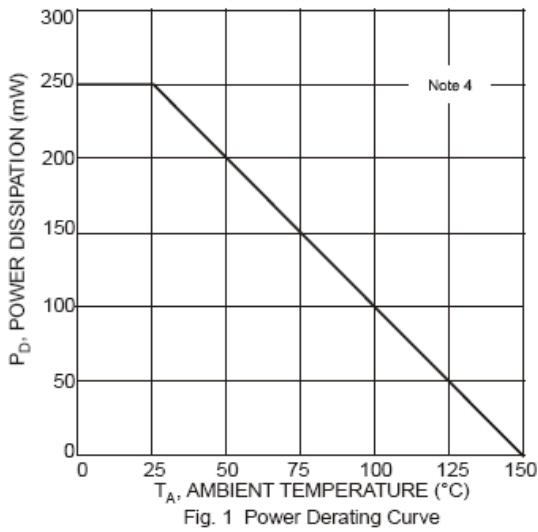
Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	75	-	V
Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 50 \text{ mA}$ at $I_F = 150 \text{ mA}$	V_F	- - - -	0.715 0.855 1 1.25	V
Peak Reverse Current at $V_R = 20 \text{ V}$ at $V_R = 75 \text{ V}$ at $V_R = 25 \text{ V}, T_j = 150^\circ\text{C}$ at $V_R = 75 \text{ V}, T_j = 150^\circ\text{C}$	I_R	- - - -	25 1 30 50	nA μA μA μA
Total Capacitance at $V_R = 0 \text{ V}, f = 1 \text{ MHz}$	C_T	-	2	pF
Reverse Recovery Time at $I_F = I_R = 10 \text{ mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$	t_{rr}	-	4	ns



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