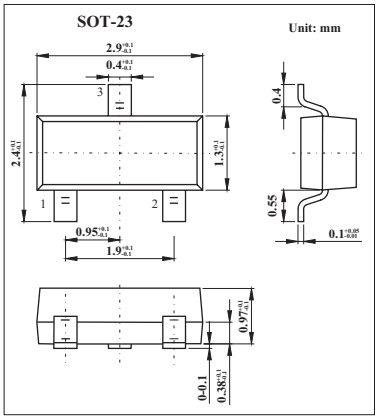
Low-leakage diode

BAS116



Features

- Plastic SMD package
- Low leakage current: typ. 3 pA
- Switching time: typ. 0.8 μs
- Continuous reverse voltage:max. 75 V
- Repetitive peak reverse voltage:max. 85 V
- Repetitive peak forward current:max. 500 mA.

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Conditions	Min	Max	Unit
Repetitive peak reverse voltage	V_{RRM}			85	V
Continuous reverse voltage	V_R			75	V
Continuous forward current	I_F			215	mA
Repetitive peak forward current	I_{FRM}			500	mA
Non-repetitive peak forward current	I_{FSM}	square wave; T_j = 25 ℃ prior to surge			A
		t = 1 μs		4	
		t = 1 ms		1	
		t = 1 s		0.5	
Total power dissipation	P_{tot}	$T_{a\ mb}$ = 25 ℃; note 1		250	mW
Storage temperature	T_{stg}		-65	+150	℃
Junction temperature	T_j			150	℃
thermal resistance from junction to tie-point	$R_{th\ j\text{-}t\ p}$			330	K/W
thermal resistance from junction to ambient	$R_{th\ j\text{-}a}$			500	K/W

BAS116

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Conditions	Typ	Max	Unit
Forward voltage	V_F	I_F = 1 mA		0.9	V
		I_F = 10 mA		1	
		I_F = 50 mA		1.1	
		I_F = 150 mA		1.25	
Reverse current	I_R	V_R = 75 V	0.003	5	nA
		V_R = 75 V; T_j = 150 ℃	3	80	
Diode capacitance	C_d	f = 1 MHz; V_R = 0	2		pF
Reverse recovery time	t_{rr}	when switched from I_F = 10 mA to I_R = 10 mA; R_L = 100 Ω ;measured at I_R = 1 mA;	0.8	3	μ s

■ Marking

Marking	JVp