

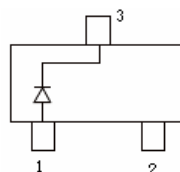
SOT-23 Plastic-Encapsulate DIODE

BAS16 SWITCHING DIODE

FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

Marking: A6

Maximum Ratings @T_A=25°C

SOT-23



Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	100	V
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Peak forward surge current @=1.0μs @=1.0s	I_{FSM}	2.0 1.0	A
Power Dissipation	P_D	225	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	556	°C/W
Junction temperature	T_j	150	°C
Storage temperature	T_{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 100\mu A$	75		V
Reverse voltage leakage current	I_R	$V_R = 75V$		1	μA
Forward voltage	V_F	$I_F = 1mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 150mA$		0.715 0.855 1 1.25	V
Diode capacitance	C_D	$V_R = 0, f = 1MHz$		2	pF
Reveres recovery time	t_{rr}	$I_F = I_R = 10mA, I_{rr} = 0.1 \times I_R,$ $R_L = 100\Omega$		6	nS

Typical Characteristics

BAS16

