

™

BAS16X

150mW 75Volt Switching Diode

Features

- Lead Free Finish/Rohs Compliant("P" Suffix designates Compliant. See ordering information)
- Ultra-Small Surface Mount Package
- Fast Switching Speed
- For General Purpose Switching Applications
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Marking : A6

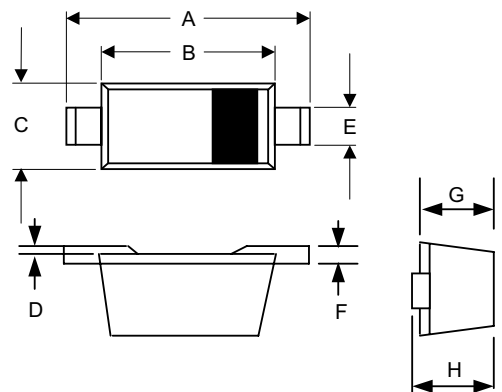
Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 635°C/W Junction To Ambient

Electrical Characteristics @ 25°C Unless Otherwise Specified

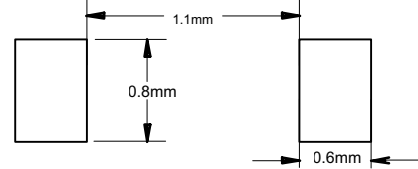
DC Reverse Voltage	V_R	75V	
Reverse breakdown voltage	$V_{(BR)R}$	75V	$I_R=100\mu A$
Forward Current	I_F	200mA	
Power Dissipation	P_D	150mW	
Peak Forward Surge Current	I_{FSM}	500mA	
Maximum Instantaneous Forward Voltage	V_F	715mV 815mV 1000mV 1250mV	$I_F = 1\text{mA}$ $I_F = 10\text{mA};$ $I_F = 50\text{mA}$ $I_F = 150\text{mA}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1 μA 50 μA	$V_R=75\text{Volts}$ $T_J = 25^\circ\text{C}$ $T_J = 150^\circ\text{C}$
Typical Diode Capacitance	C_D	2pF	Measured at 1.0MHz, $V_R=0V$
Reverse Recovery Time	T_{rr}	6nS	$I_F=I_R=10\text{mAdc},$ $V_R = 0V$ $R_L=50\Omega$

SOD-523



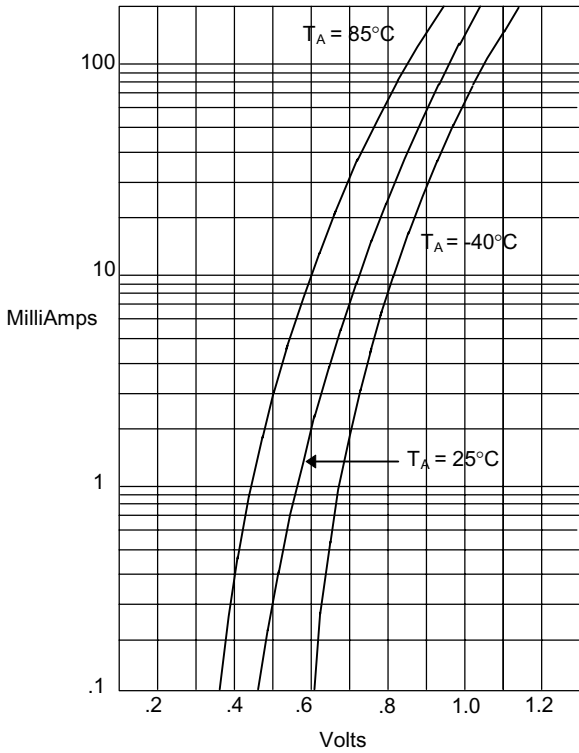
DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.059	.067	1.50	1.70	
B	.043	.051	1.10	1.30	
C	.030	.033	0.75	0.85	
D	.001	.003	0.01	0.07	
E	.010	.014	0.25	0.35	
F	.003	.003	0.08	0.15	
G	.020	.028	0.50	0.70	
H	.020	.031	0.51	0.78	

Suggested Solder Pad Layout



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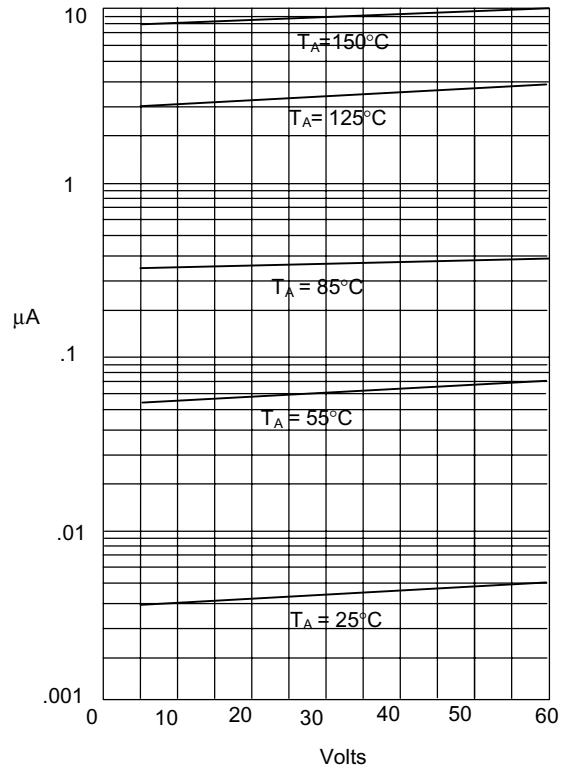
Figure 1
Typical Forward Characteristics



Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

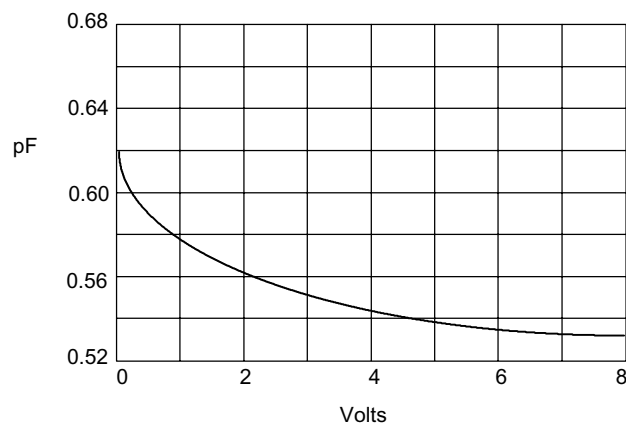
Figure 2

Typical Reverse Characteristics



Instantaneous Reverse Current - MicroAmperes *versus*
Reverse Voltage - Volts

Figure 3
Diode Capacitance



Diode Capacitance - pF *versus*
Reverse Voltage - Volts

Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel