

Fast Switching Diode Array – 150mA 75V

Features

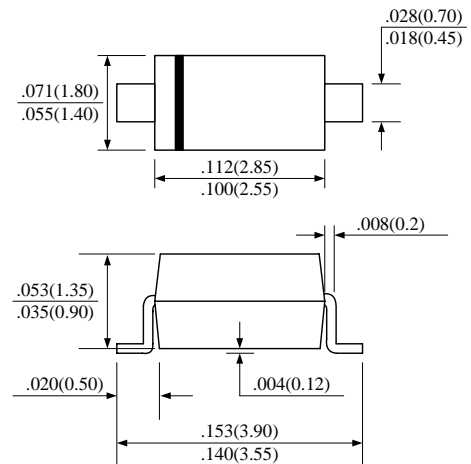
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- For use in low voltage high frequency inverters, free wheeling and polarity protection application
- High temperature soldering guaranteed
- High reliability
- High surge current capability
- Lead free device
- ESD sensitive product handling required

Mechanical data

- Case : Molded plastic
- Polarity : Color band denotes cathode end

Maximum ratings and Electrical characteristics

SOD-123



TYPE	SYMBOL	BAV16BPT	UNIT	
Maximum Non-Repetitive Peak Reverse Voltage	VRM	100	V	
Maximum RMS Voltage	VRMS	53	V	
Maximum Repetitive Peak Reverse and DC Blocking Voltage	VRRM, VDC	75	V	
Maximum Average Forward Rectified Current	IO	150	mA	
Non-Repetitive Peak Forward surge Current	@ t = 1.0uSec	IFSM	2.0	A
	@t = 1.0Sec		1.0	
Maximum Instantaneous Forward Voltage	@ IF = 1.0mA	VF	0.715	V
	@ IF = 10mA		0.855	
	@ IF = 50mA		1.00	
	@ IF = 150mA		1.25	
Maximum Average Reverse Current	@TJ = 25°C	IR	1.0	µA
	@TJ = 150°C		50	
Typical Junction Capacitance (Note 1)	CJ	2.0	pF	
Maximum Reverse Recovery Time (Note 2)	TRR	4.0	nSec	
Thermal Resistance Junction to Ambient (Note 3)	RθJA	625	°C/W	
Maximum Storage and Operating Temperature Range	TJ, TSTG	-65 - 150	°C	

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 0 volts

August 2007 / Rev.5

2. Measured at applied forward current of 10mA and reverse current of 10mA

3. Device mounted on FR-4 by 1 inch x 0.85 inch x 0.062 inch

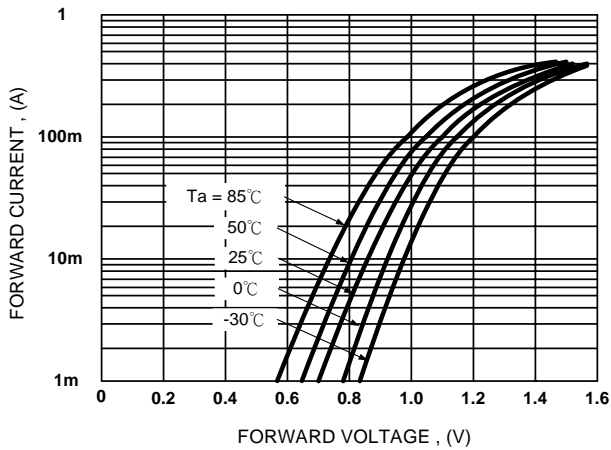


Figure 1. Forward Characteristics

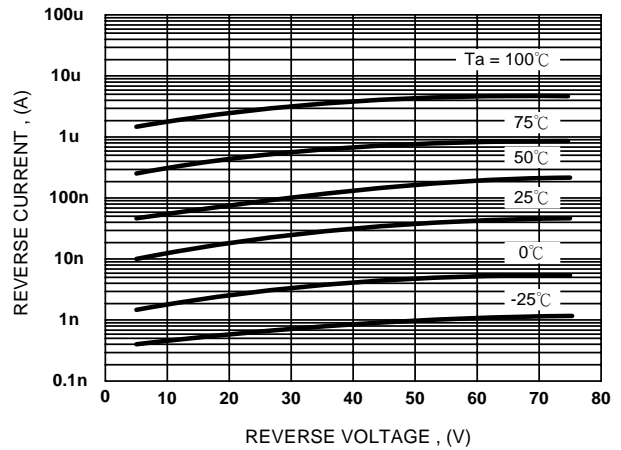


Figure 2. Reverse Characteristics

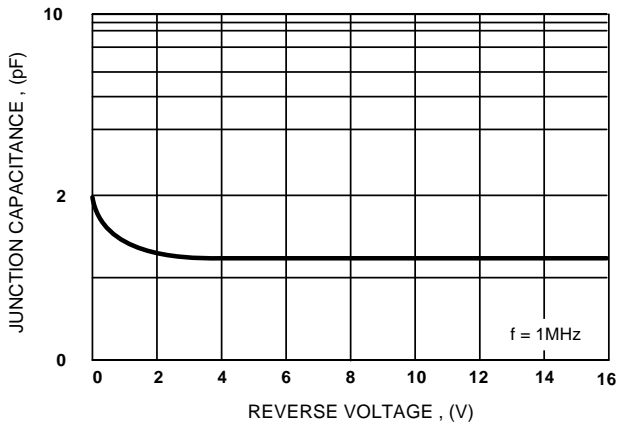


Figure 3. Typical Junction Capacitance

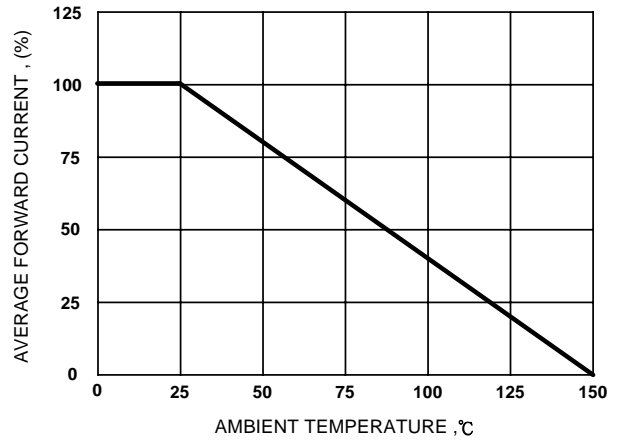


Figure 4. Forward Current Derating Curve

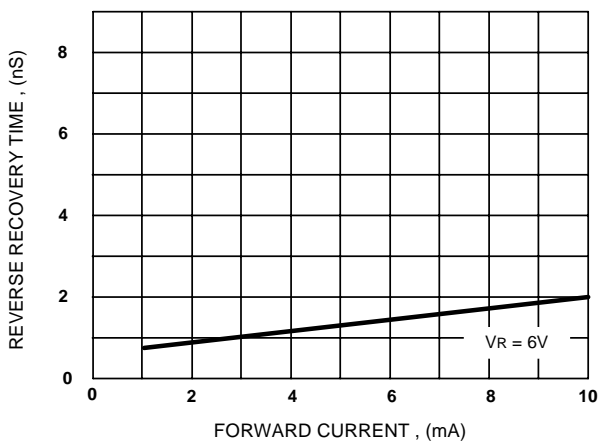


Figure 5. Reverse Recovery Time