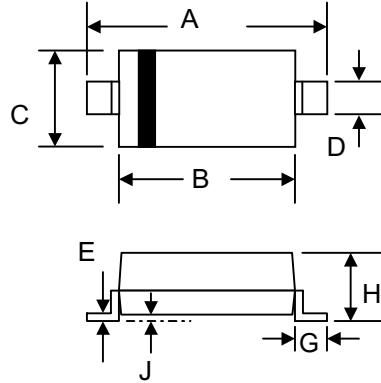


Data Sheet 2753, Rev. -

**Features**

- High Conductance
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Application
- Plastic Material – UL Recognition Flammability Classification 94V-O



SOD-123				
Dim	Min	Max	Min	Max
A	3.6	3.9	0.14	0.154
B	2.5	2.8	0.098	0.110
C	1.4	1.8	0.055	0.070
D	0.5	0.7	0.020	0.028
E	—	0.2	—	0.008
G	0.4	—	0.016	—
H	0.95	1.35	0.037	0.053
J	—	0.12	—	0.005
	In mm		In inch	

**Mechanical Data**

- Case: SOD-123, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.01 grams (approx.)
- Marking: A6

**Maximum Ratings** @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	BAV16W	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	75	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	53	V
Forward Continuous Current (Note 1)	I <sub>FM</sub>	300	mA
Average Rectified Output Current (Note 1)	I <sub>O</sub>	150	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0µs @ t = 1.0s	I <sub>FSM</sub>	2.0 1.0	A
Power Dissipation (Note 1)	P <sub>d</sub>	350	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	R <sub>θJA</sub>	357	K/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150	°C

**Electrical Characteristics** @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	BAV16W	Unit
Forward Voltage Drop @ I <sub>F</sub> = 10mA	V <sub>FM</sub>	0.855	V
Peak Reverse Leakage Current @ V <sub>R</sub> = 75V	I <sub>RM</sub>	1.0	µA
Typical Junction Capacitance (V <sub>R</sub> = 0V DC, f = 1.0MHz)	C <sub>j</sub>	2.0	pF
Reverse Recovery Time (Note 2)	t <sub>rr</sub>	6.0	nS

Note: 1. Valid provided that terminals are kept at ambient temperature.  
2. Measured with I<sub>F</sub> = I<sub>R</sub> = 10mA, I<sub>RR</sub> = 0.1 x I<sub>R</sub>, R<sub>L</sub> = 100Ω.

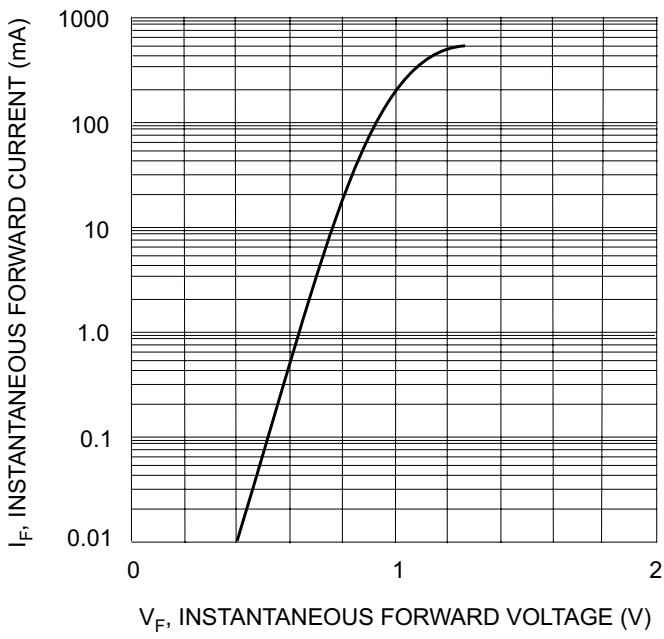


Fig. 1 Forward Characteristics

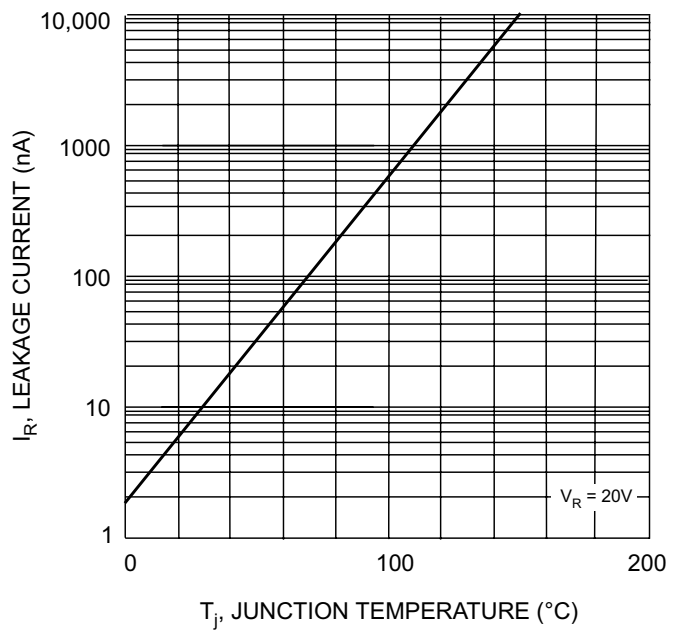


Fig. 2 Leakage Current vs Junction Temperature

**TECHNICAL DATA**

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