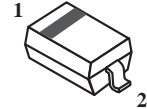


### Surface Mount Schottky Barrier Diodes

 Lead(Pb)-Free

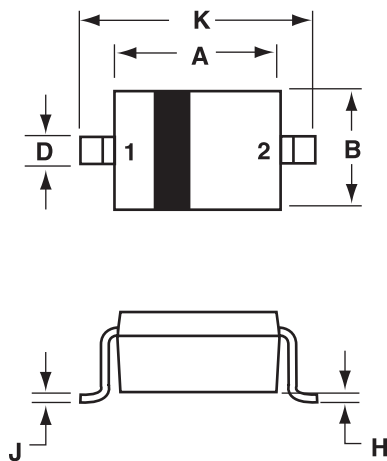
**SMALL SIGNAL  
SCHOTTKY DIODES  
1000m AMPERES  
40 VOLTS**



**SOD-123**

### SOD-123 Outline Dimensions

Unit:mm



SOD-123		
Dim	Min	Max
A	2.55	2.85
B	1.40	1.80
C	0.95	1.35
D	0.50	0.70
E	0.30 REF	
H	-	0.10
J	-	0.15
K	3.55	3.85

PIN 1. CATHODE  
2. ANODE

**Maximum Ratings and Electrical Characteristics, Single Diode @T<sub>A</sub>=25°C**

Parameter	Symbol	Limits	Unit
DC reverse voltage	V <sub>R</sub>	40	V
Mean rectifying current	I <sub>O</sub>	1	A
Peak forward surge current	I <sub>FSM</sub>	30	A
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-40-125	°C

**Electrical Ratings @T<sub>A</sub>=25°C**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward voltage I <sub>F</sub> =1A	V <sub>F</sub>			0.51	V
Reverse current V <sub>R</sub> =40V	I <sub>R</sub>			30	μ A

**Device Marking**

B160W-40 = 74

## Typical Characteristics

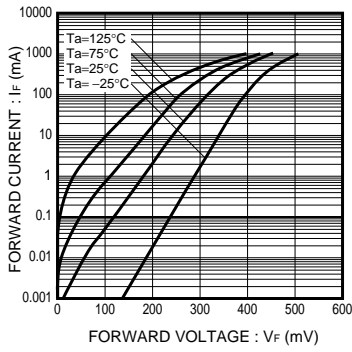


Fig.1 Forward Temperature Characteristics

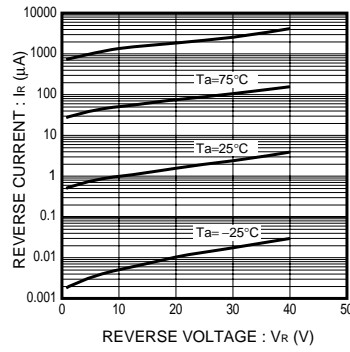


Fig.2 Reverse Temperature Characteristics

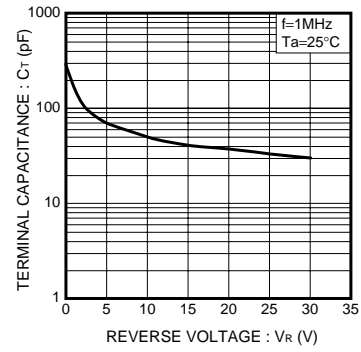


Fig.3 Capacitance Between Terminals Characteristics

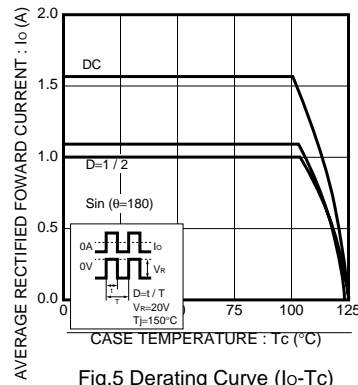
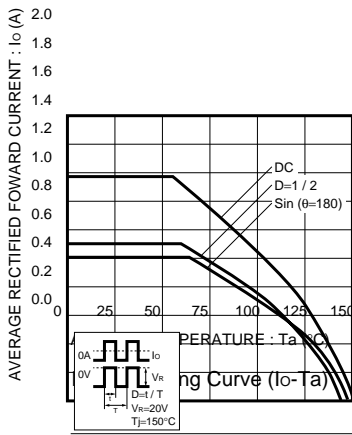


Fig.5 Derating Curve (Io-Tc)