

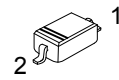
■ PRODUCT CHARACTERISTICS

VR(@IC=100uA)	20V
VF(Typ@IF=3A)	0.75V
IR(@VR=20V)	1mA
Io	1A

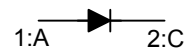
■ FEATURES

- * high speed
- * Low forward voltage
- * Fast reverse recovery time

SYMBOL



SOD-123



■ ABSOLUTE MAXIMUM RATINGS (TA=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Non-Repetitive Peak Reverse Voltage	V _{RM}	20	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	20	V
Work Peak Reverse Voltage	V _{RWM}	20	V
DC Blocking Voltage	V _R	20	V
RMS Blocking Voltage	V _{R(RMS)}	14	V
Repetitive Peak Forward Current	I _{FRM}	1.5	A
Average Rectified Output Current	I _O	1	A
Non-repetitive Peak Forward Surge Current@t=8.3ms	I _{FSM}	9	A
Power Dissipation	P _D	500	mW
Thermal Resistance From Junction to Ambient	R _{θJA}	200	°C/W
Operation Junction Temperature Range	T _J	-40 ~ +125	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

■ ELECTRICAL CHARACTERISTICS (TA=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	V _(BR)	I _R =1mA	20	-	-	V
Forward Voltage	V _F	I _F =1A	-	-	0.45	V
		I _F =3A	-	-	0.75	V
Reverse Voltage Leakage Current	I _R	V _R =20V	-	-	1	mA
Diode Capacitance	C _D	V _R =4V, f=1.0MHz	-	-	120	pF

■ TYPICAL CHARACTERISTICS

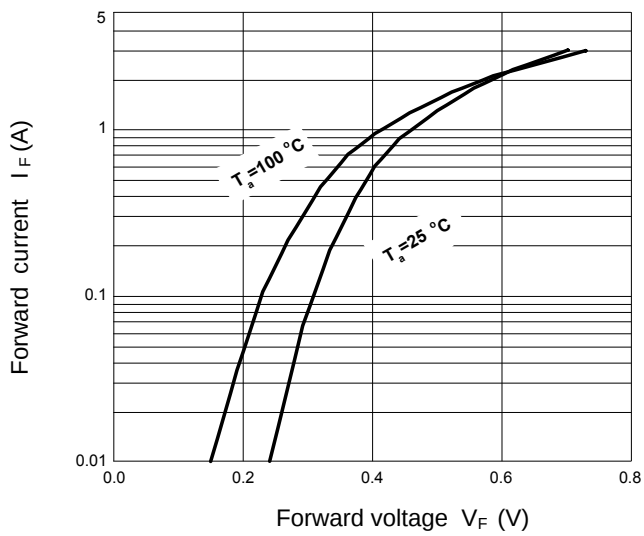


Figure 1: Forward characteristics

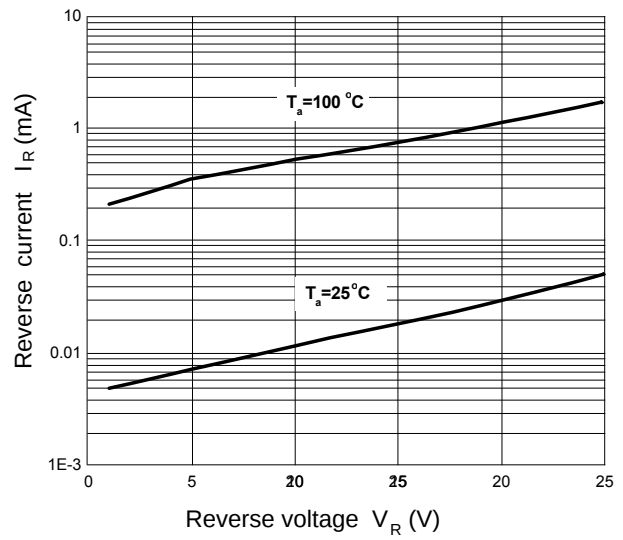


Figure 2: Reverse characteristics

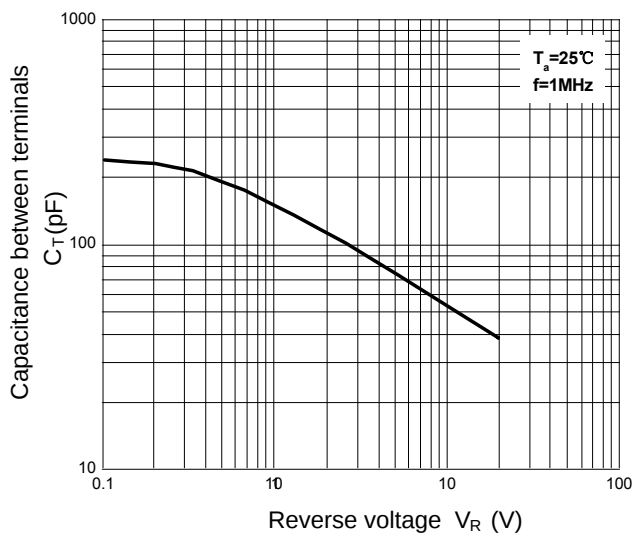


Figure 3: Capacitance characteristics

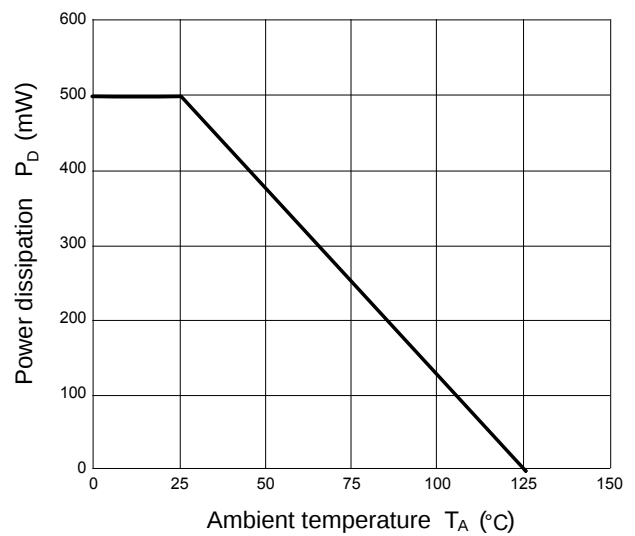
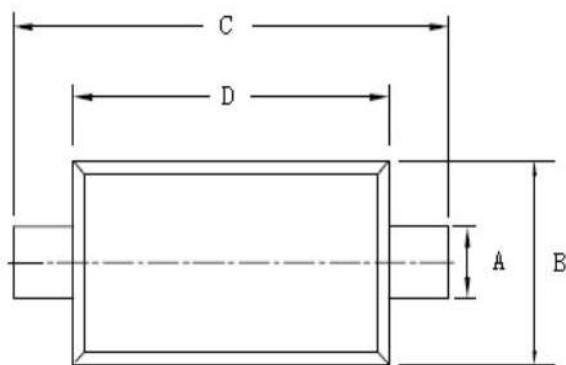
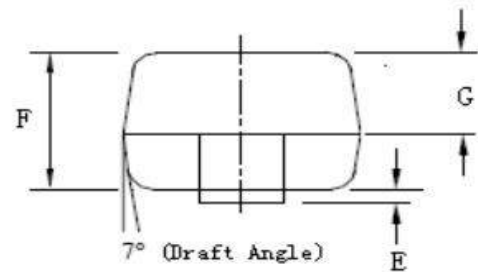
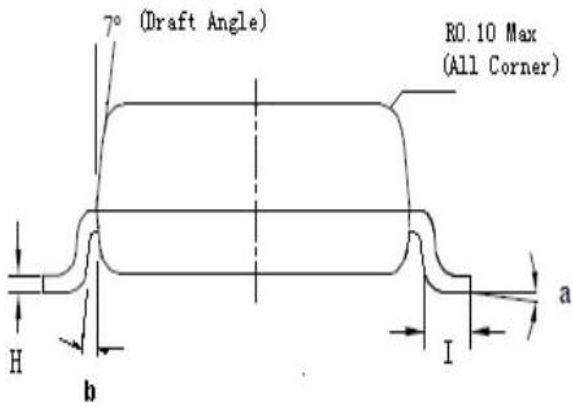


Figure 4: Power derating curve

■ SOD123 PACKAGE OUTLINE DIMENSIONS



Symbol	Dim in mm		
	Min	Nom	Max
A	0.520	0.550	0.570
B	1.400	1.550	1.700
C	3.550	3.650	3.850
D	2.550	2.650	2.850
E	0.000	0.050	0.100
F	1.050	1.100	1.150
G	0.620	0.650	0.670
H	0.090	0.100	0.110
I	0.250	0.350	0.450
a	0°	—	6°
b	0.4°	—	0.8°