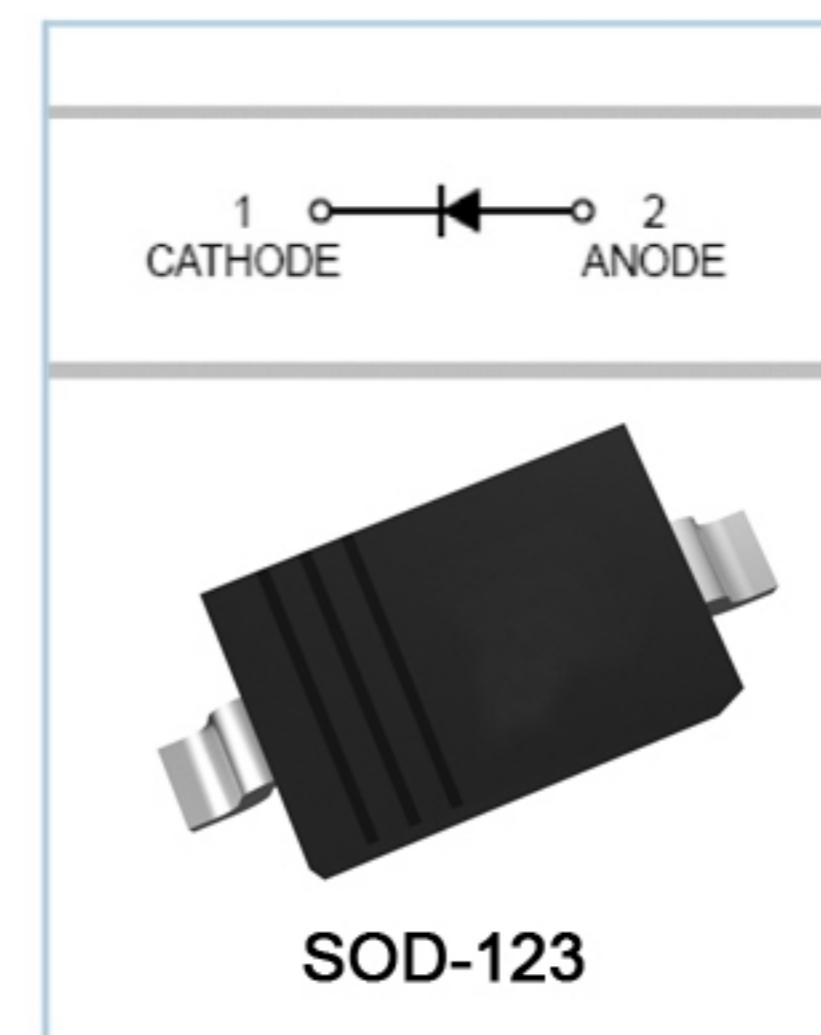


Fast switching Diode

FEATURES

- Fast Switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion.
- For General Purpose Switching Applications
- High Conductance



APPLICATIONS

- Surface mount fast switching diode

ORDERING INFORMATION

Type No.	Marking	Package Code
1N4448W	T5	SOD-123

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage	V _{RRM}	75	V
Working Peak Reverse Voltage	V _{RWM}		
DC Reverse Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	500	mA
Average Rectified Output Current	I _o	250	mA
Non-Repetitive Peak Forward Surge Current @t=1.0 μs @t=1.0 s	I _{FSM}	4.0 2.0	A
Power Dissipation	P _d	350	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	357	°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(\text{BR})R}$	75	-	V	$I_R=1.0\mu\text{A}$
Forward Voltage	V_{F1}	0.62	0.72	V	$I_F=5\text{mA}$
	V_{F2}		0.855		$I_F=10\text{mA}$
	V_{F3}		1.0		$I_F=100\text{mA}$
	V_{F4}		1.25		$I_F=150\text{mA}$
Reverse Current	I_{R1}	-	2.5	μA	$V_R=75\text{V}$
	I_{R2}		25	nA	$V_R=20\text{V}$
Capacitance between terminals	C_T	-	4.0	pF	$V_R=0, f=1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	-	4.0	ns	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

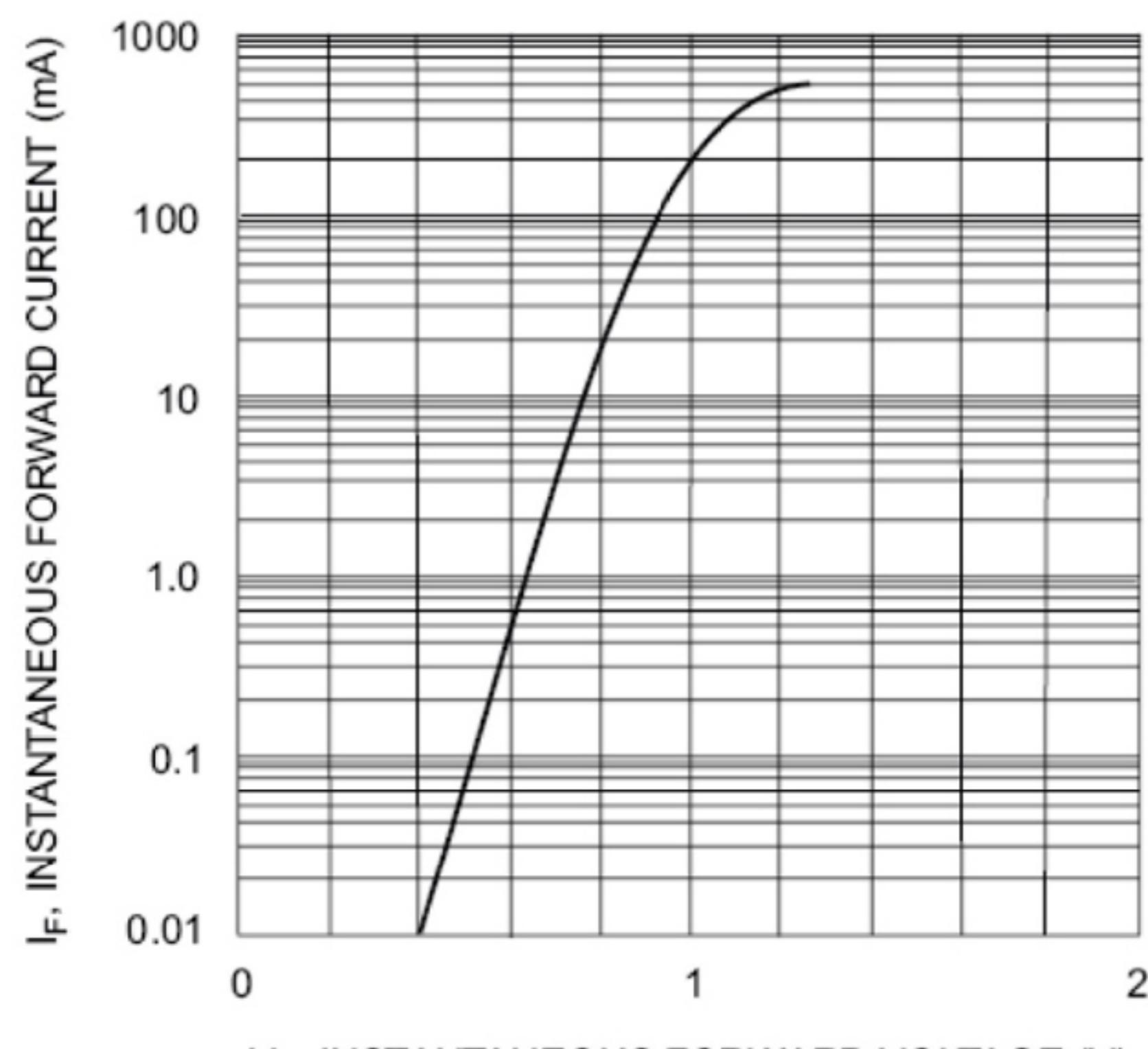


Fig. 1 Forward Characteristics

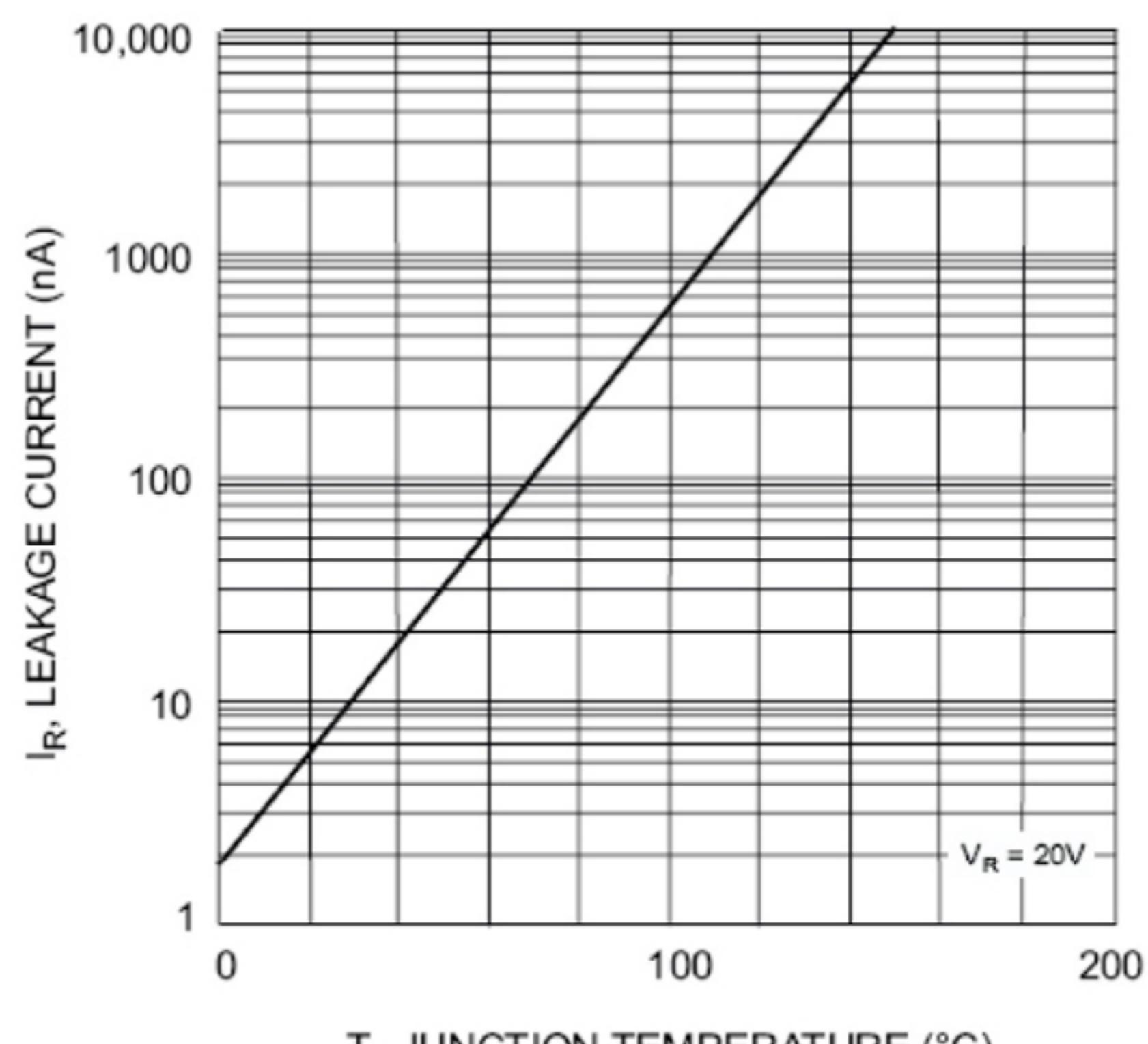
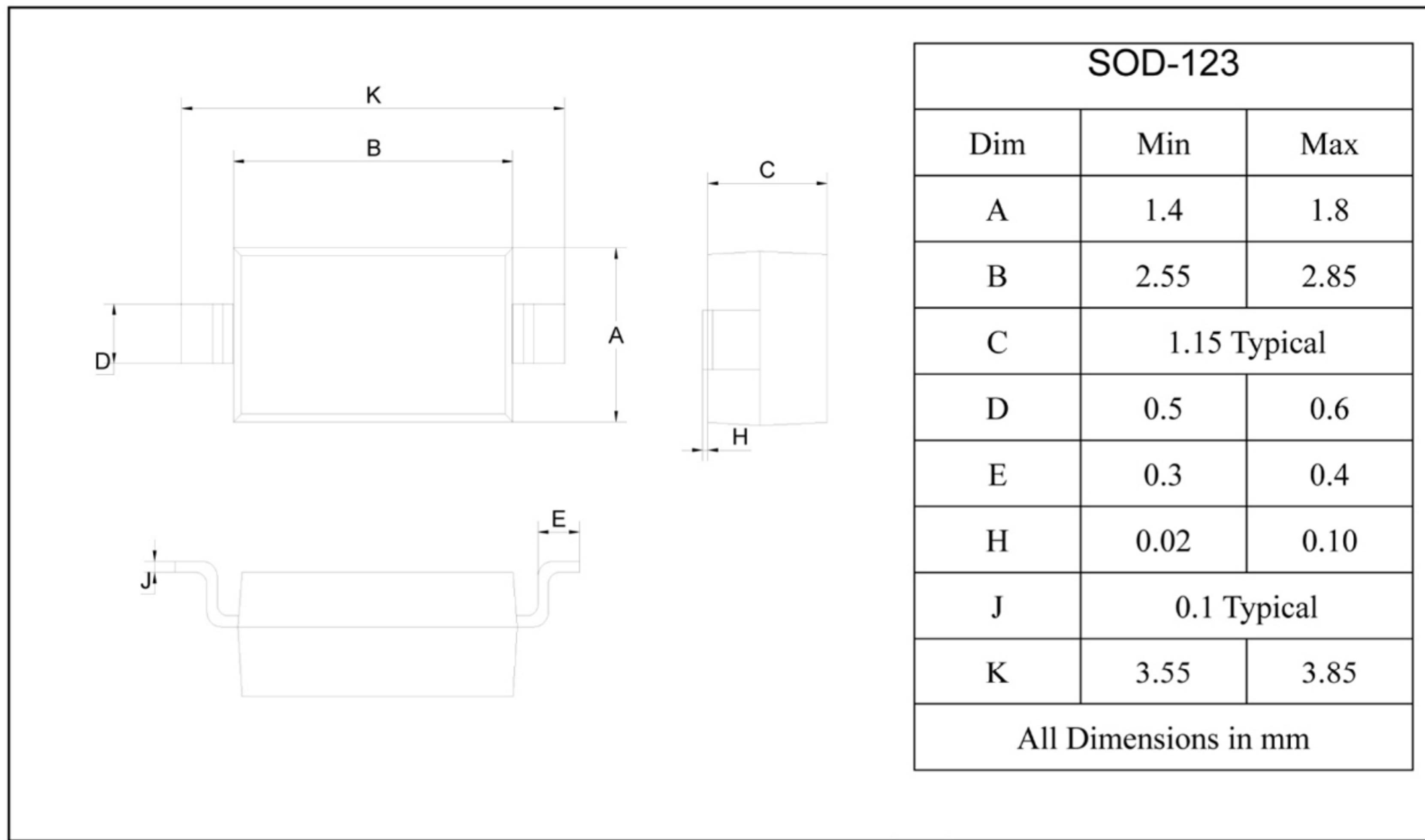


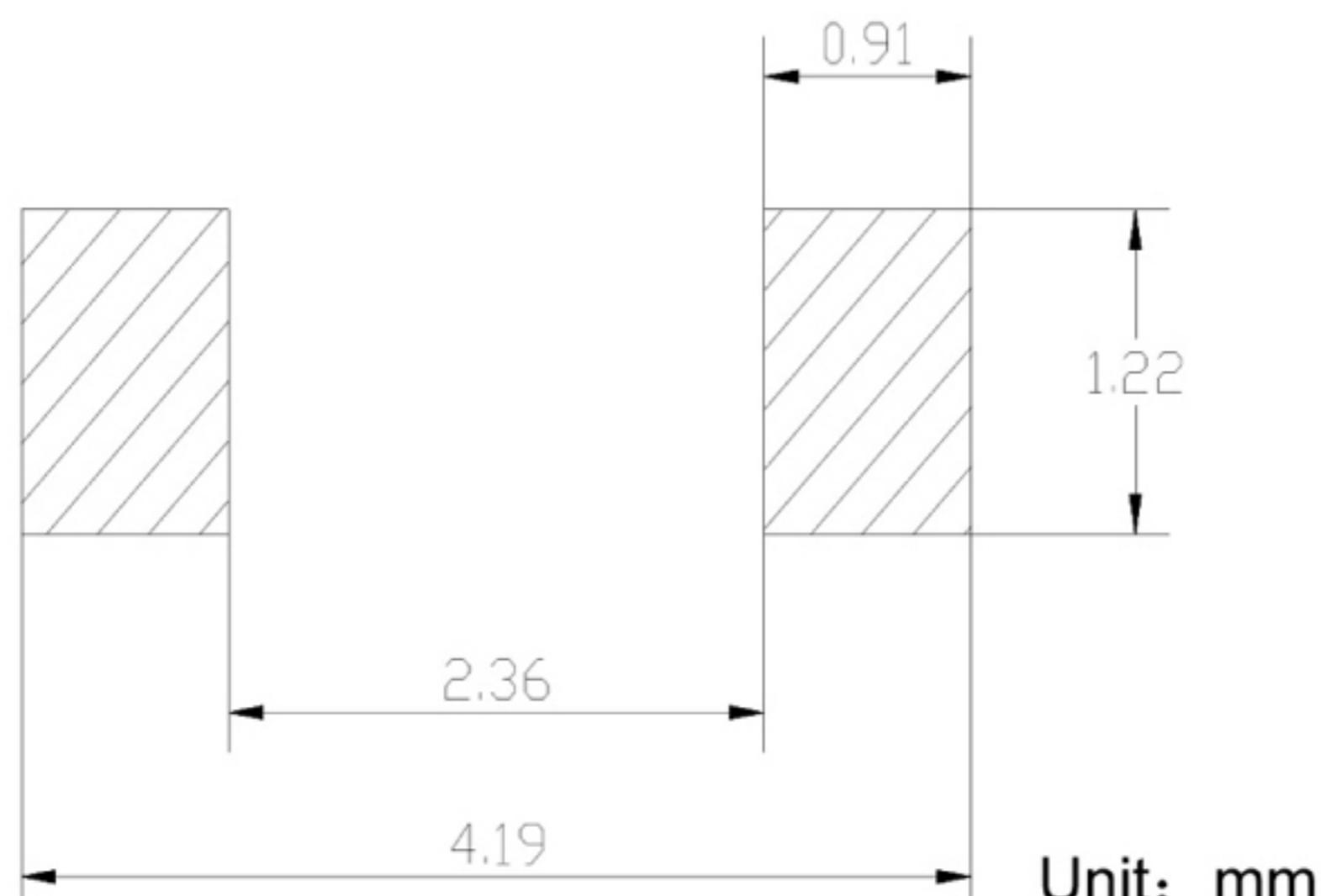
Fig. 2 Leakage Current vs Junction Temperature

PACKAGE OUTLINE

Plastic surface mounted package



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
1N4448W	SOD-123	3000/Tape&Reel