

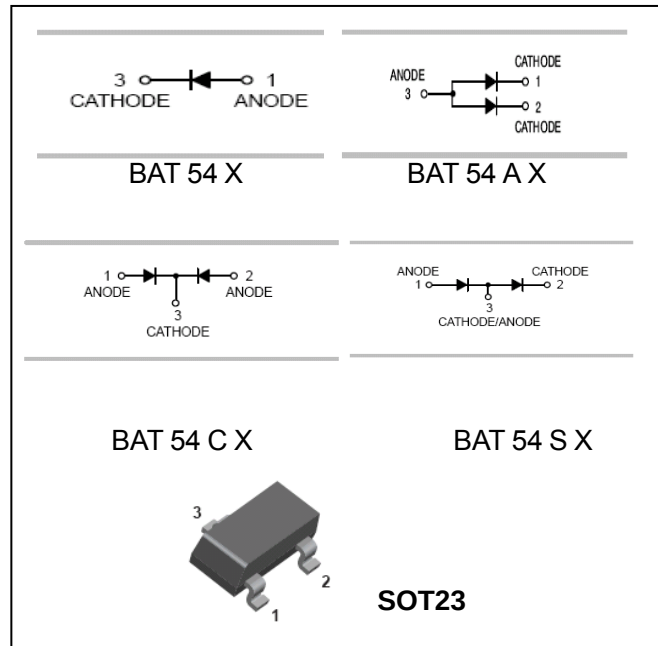
Surface Mount Schottky Barrier diode

FEATURES

- Fast switching .
- Low Turn-on voltage.
- PN Junction Guard Ring for Transient and ESD Protection.
- Available in Lead Free Version.
- MSL 3



Lead-free



ORDERING INFORMATION

Type No.	Marking	Package Code
BAT 54 X	KL1	SOT23
BAT 54 A X	KL2	SOT23
BAT 54 C X	KL3	SOT23
BAT 54 S X	KL4	SOT23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

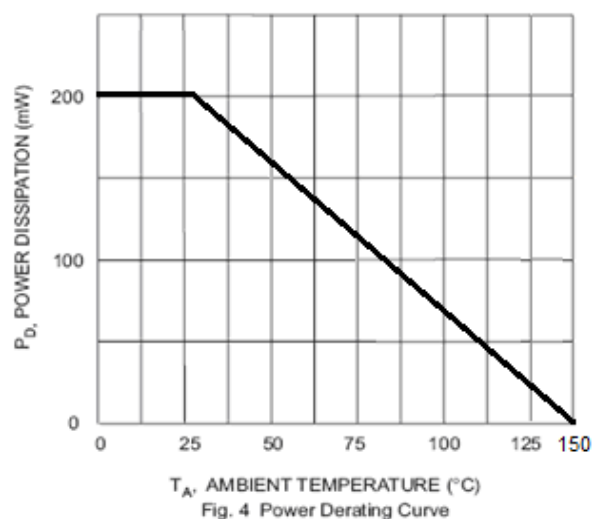
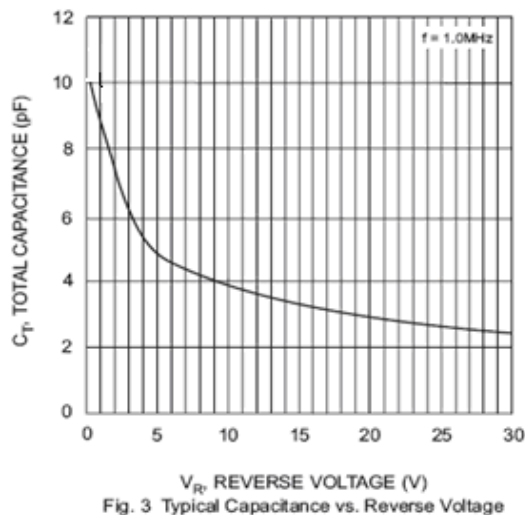
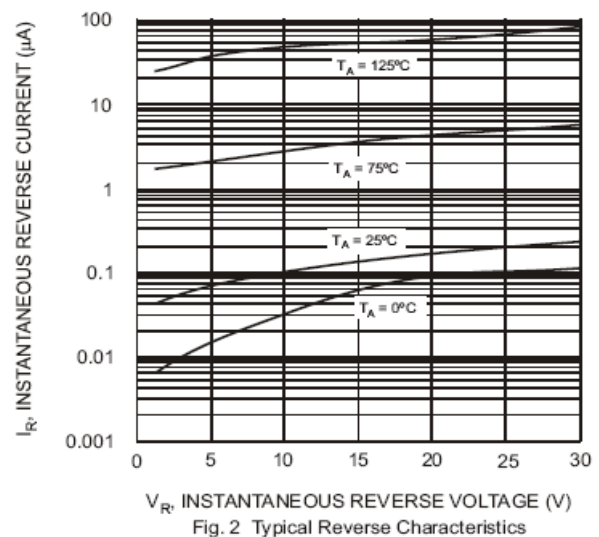
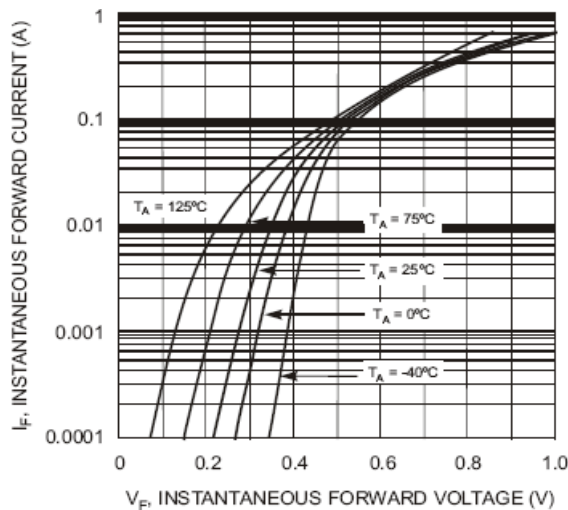
Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage	V_{RRM}	30	V
Working Peak Reverse Voltage	V_{RWM}		
DC Reverse Voltage	V_R		
Forward Continuous Current	I_F	200	mA
Power Dissipation	P_d	225	mW
Thermal resistance, junction to ambient air	$R_{\theta JA}$	500	°C/W
Thermal resistance, junction to case	$R_{\theta JC}$	360	°C/W
Operating and Storage temperature	T_J, T_{STG}	-55 to +150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	30			V	$I_R=100\mu\text{A}$
Forward voltage	V_{F1}			0.24	V	$I_F=0.1\text{mA}$
				0.32	V	$I_F=1\text{mA}$
				0.40	V	$I_F=10\text{mA}$
				0.50	V	$I_F=30\text{mA}$
				1	V	$I_F=100\text{mA}$
Reverse current	I_R			2	μA	$V_R=25\text{V}$
Diode Capacitance	C_D			10	pF	$V_R=1\text{V}, f=1\text{MHz}$
Reverse Recovery Time	t_{rr}			5	ns	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1I_R, R_L=100\Omega$

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

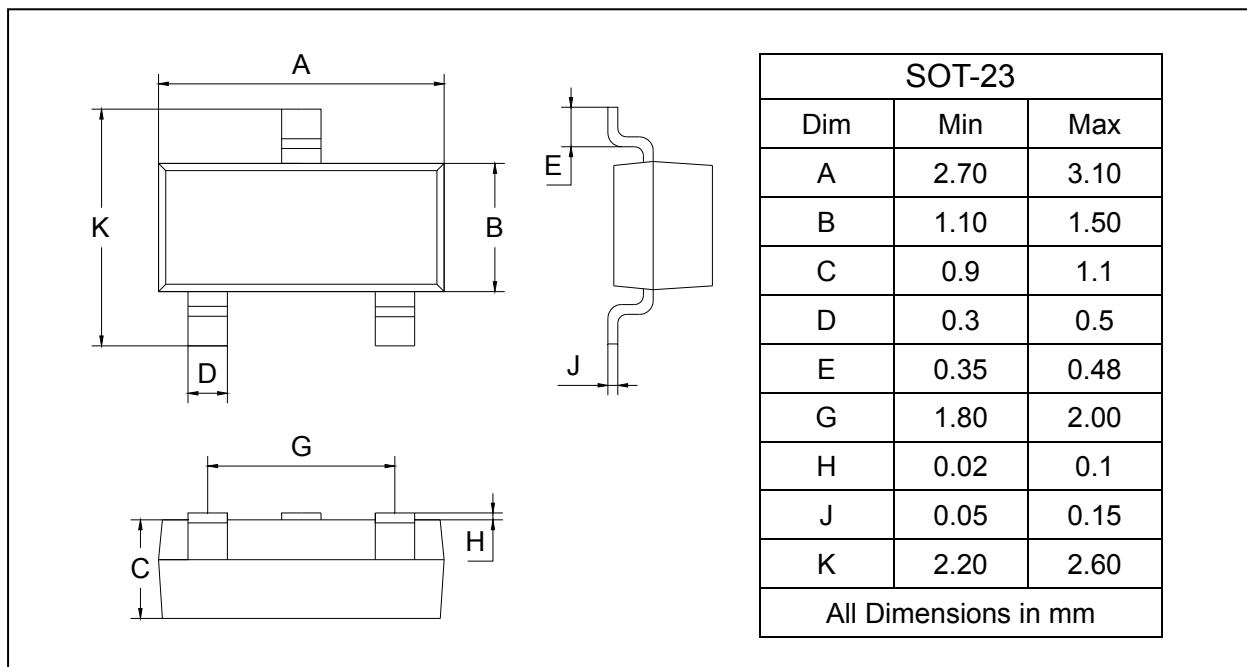


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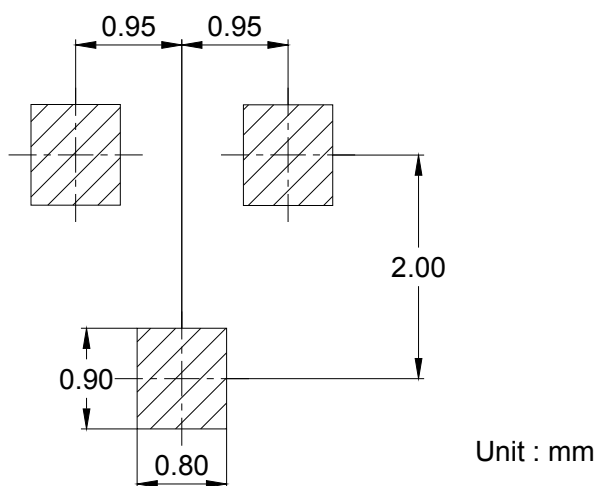
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BAT54X/AX/CX/SX	SOT23	3000/Tape&Reel