

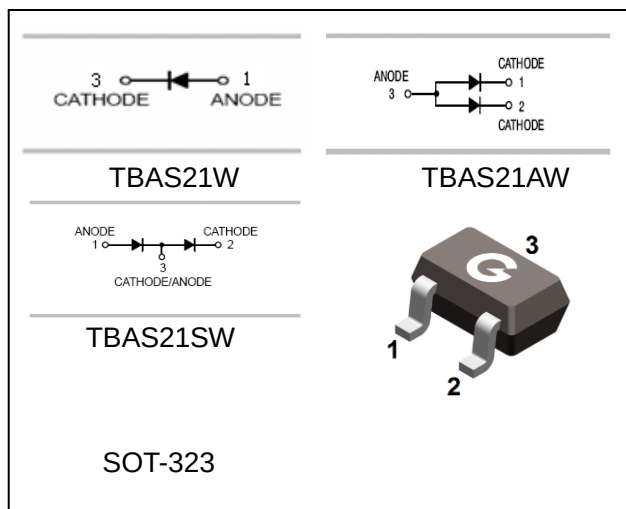
Surface mount switching diode

TBAS21W/AW//SW

FEATURES

- Fast switching speed
- Low capacitance : $C_d \leq 2\text{pF}$
- package ideally suited for
- Very small SMD plastic package
- Low leakage current
- High reverse voltage: $V_R \leq 250\text{V}$
- Halogen free
- Qualified to AEC-Q101 standards for high reliability

HF



APPLICATIONS

- High speed switching application

ORDERING INFORMATION

Type No.	Marking	Package Code
TBAS21W	KT3	SOT-323
TBAS21AW	X6	SOT-323
TBAS21SW	X5	SOT-323

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MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_R	250	V
Forward Continuous Current	I_F	225	mA
Power Dissipation	P_{tot}	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	K/W
Thermal Resistance Junction to solder point	$R_{\theta JS}$	300	K/W
Operating Junction Temperature Range	T_j	150	°C
Storage temperature	T_{stg}	-65 to +150	°C
Ambient Temperature Range	T_{amb}	-55 to +150	°C
Repetitive peak forward current	I_{FRM}	625	mA
Non-repetitive peak forward current $T_p=1\mu s$ $T_p=100\mu s$ $T_p=10ms$	I_{FSM}	9 3 1.7	A

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	MAX	UNIT	Test Condition
Reverse Leakage Current	I_R	-	0.1	μA	$V_R=200V$
Forward voltage	V_F	-	1 1.25	V	$I_F=100mA$ $I_F=200mA$
Diode Capacitance	C_D	-	2.0	pF	$V_R=0V, f=1.0MHz$
Reverse Recovery Time	t_{rr}	-	50	ns	$I_F=I_R=10mA, I_R=1mA$

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

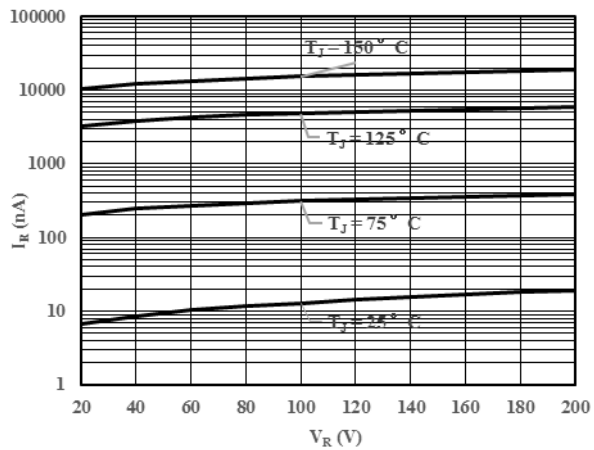


Fig 1 Typical Reverse Characteristic

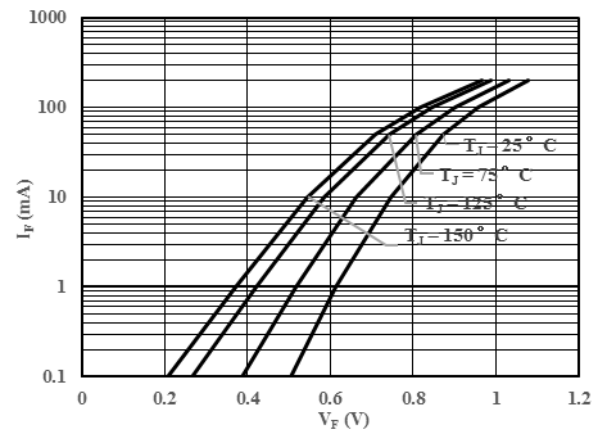


Fig 2 Typical Forward Characteristics

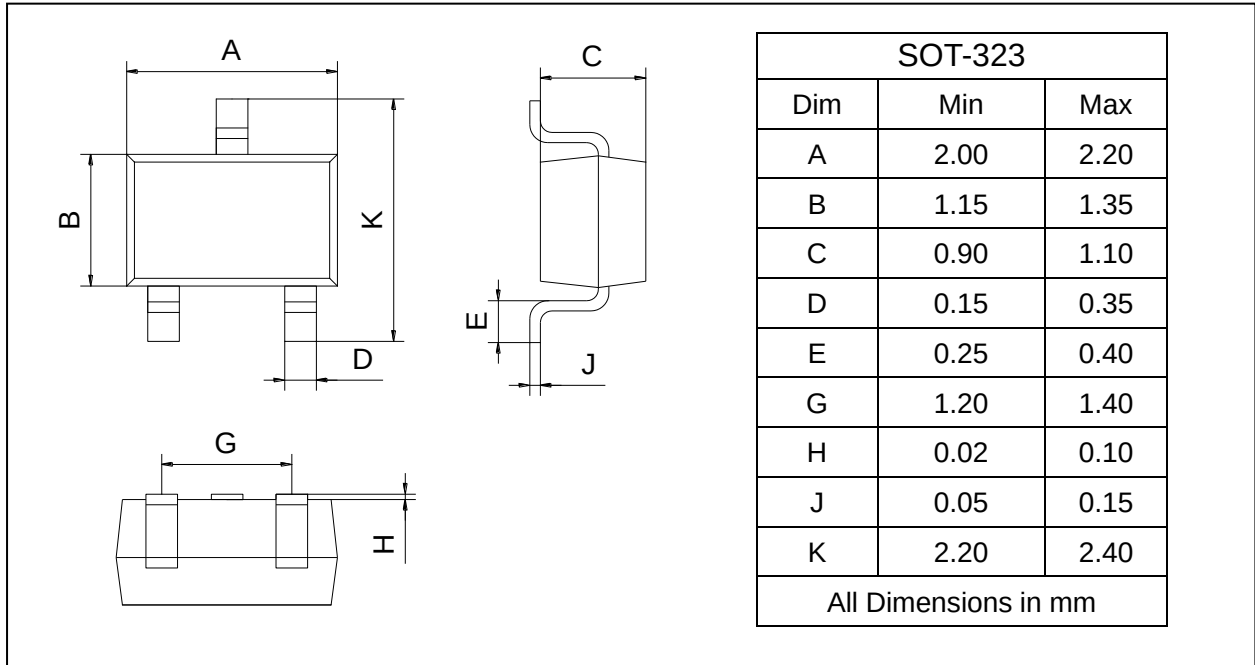
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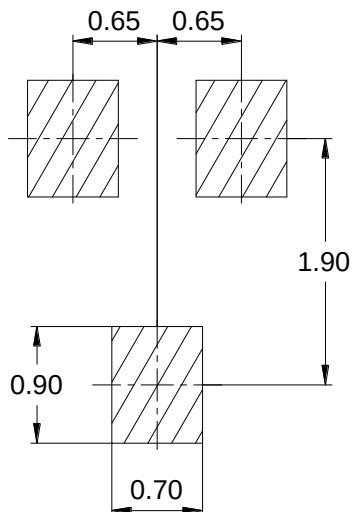
PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
TBAS21W/AW/SW	SOT-323	3000 pcs / Tape & Reel