

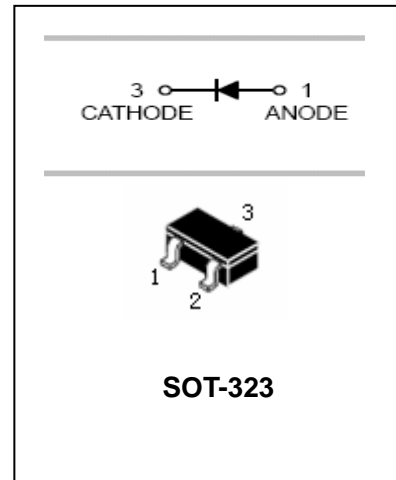
## Surface Mount Switching Diode **BAS19W/BAS20W/BAS21W**

### FEATURES

- Fast switching speed.
- High conductance.
- For general purpose switching applications.
- Surface mount package ideally suited for automatic insertion.



Lead-free



### APPLICATIONS

- For general purpose switching applications.

### ORDERING INFORMATION

Type No.	Marking	Package Code
BAS19W	KA8	SOT-323
BAS20W	KT2	SOT-323
BAS21W	KT3	SOT-323

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	BAS19W	BAS20W	BAS21W	Unit
Repetitive Peak reverse voltage	$V_{RRM}$	120	200	250	V
Diode reverse voltage	$V_R$	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	141	V
Forward continuous Current	$I_F$	400			mA
Average rectified output current	$I_O$	200			mA
Forward Surge Current	$I_{FSM}$	2.5			A
		$t=1.0\mu S$			
		0.5			
	$t=1.0S$				
Power Dissipation	$P_d$	200			mW
Junction temperature	$T_j$	150			°C
Storage temperature range	$T_{stg}$	-65-+150			°C

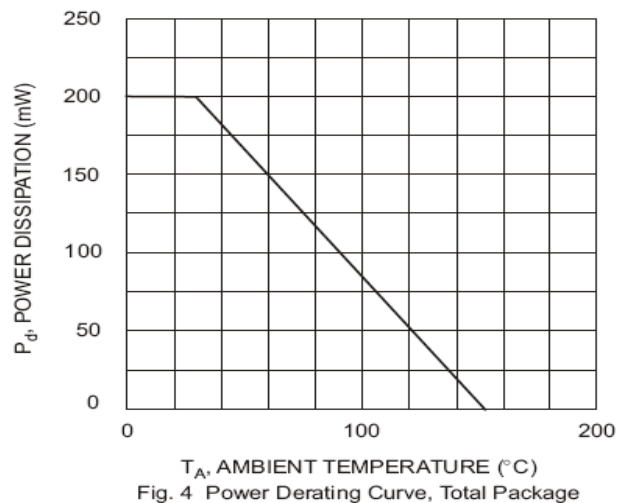
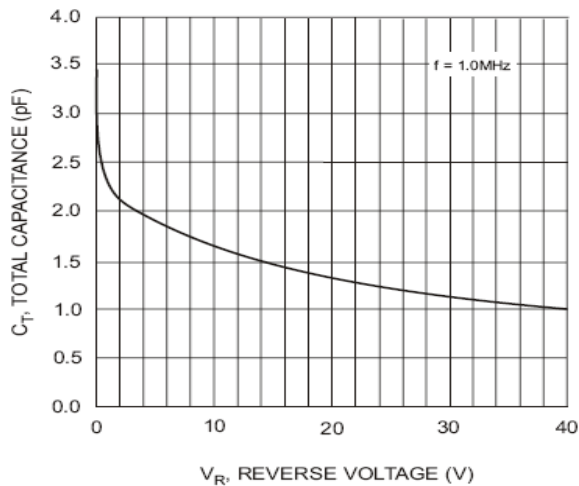
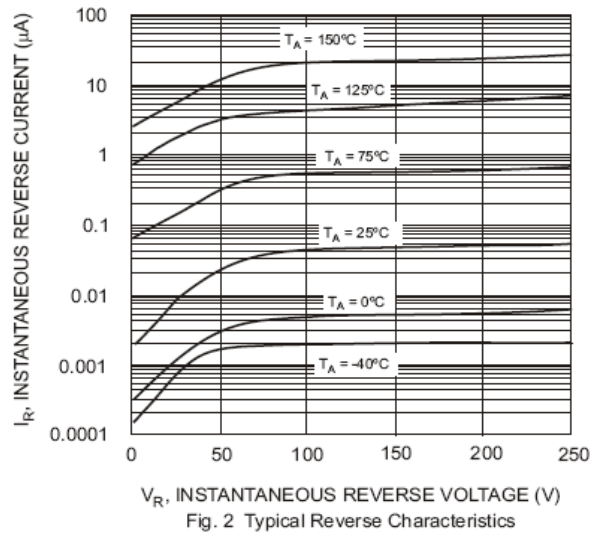
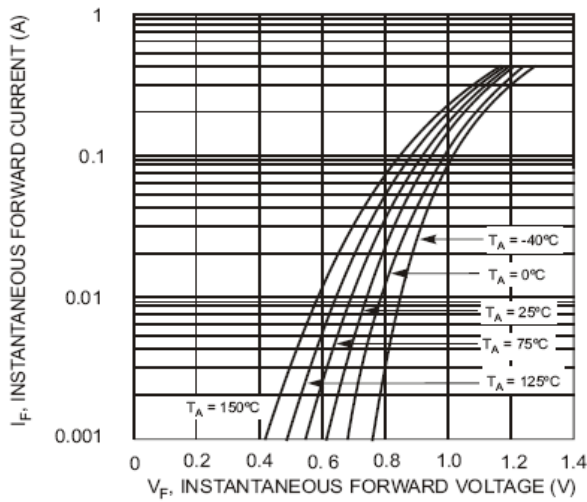
### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

# Diode Semiconductor Korea

## Surface Mount Switching Diode **BAS19W/BAS20W/BAS21W**

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	BAS19W BAS20W BAS21W	$V_{(BR)R}$	$I_R = 100\mu A$	120 200 250	V
Reverse voltage leakage current	BAS19W BAS20W BAS21W	$I_R$	$V_R = 100V$ $V_R = 150V$ $V_R = 200V$	100	nA
Forward voltage		$V_F$	$I_F = 100mA$ $I_F = 200mA$	1.0 1.25	V
Diode capacitance		$C_D$	$V_R = 0V$ $f = 1MHz$	5	pF
Reverse recovery time		$t_{rr}$	$I_F = I_R = 30mA$ $R_L = 100\Omega$	50	ns

### TYPICAL CHARACTERISTICS @ $T_a = 25^\circ C$ unless otherwise specified



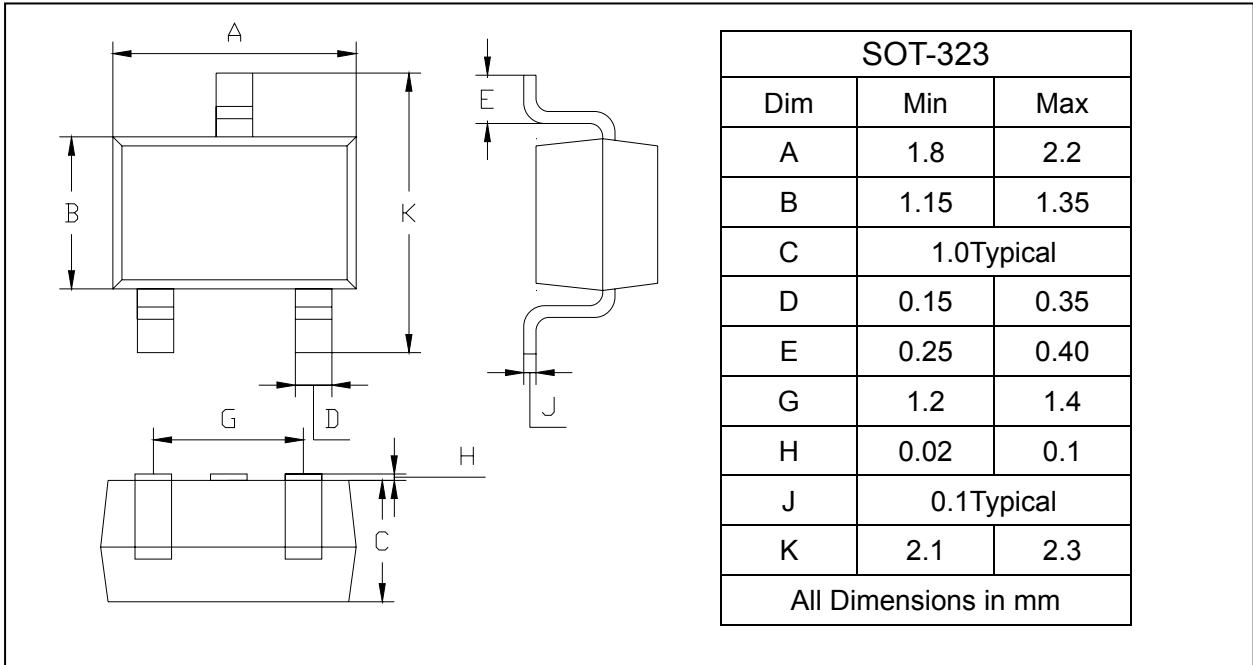
# Diode Semiconductor Korea

## Surface Mount Switching Diode **BAS19W/BAS20W/BAS21W**

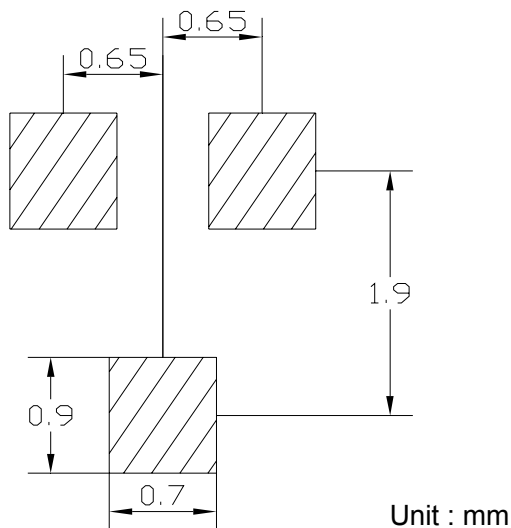
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
BAS19W/BAS20W/BAS21W	SOT-323	3000/Tape&Reel