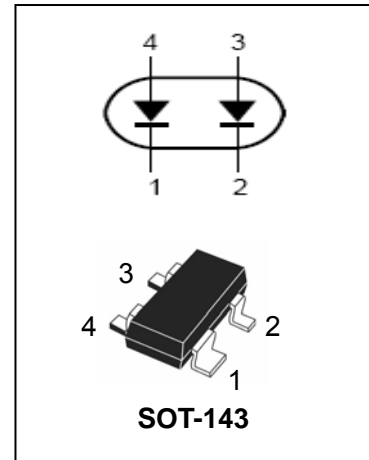


## Surface mount switching diode

## BAS28

### FEATURES

- Continuous reverse voltage:max.75V
- High switching speed:4ns.
- Repetitive peak forward current:max.500mA



### APPLICATIONS

- High speed switching application.

### ORDERING INFORMATION

Type No.	Marking	Package Code
BAS28	JT	SOT-143

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

Characteristic	Symbol	Limits	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	85	V
Continuous Reverse Voltage	$V_R$	75	V
Continuous forward current	$I_F$	215	mA
Repetitive peak forward current	$I_{FRM}$	500	mA
Surge current	$I_{FSM}$	t=1μs	4
		t=1ms	1
		t=1s	0.5
Power Dissipation	$P_d$	250	mW
Thermal resistance from junction to ambient	$R_{\theta JA}$	500	°C/W
Operating Junction Temperature Range	$T_j$	150	°C
Storage Temperature Range	$T_{STG}$	-65 to +150	°C

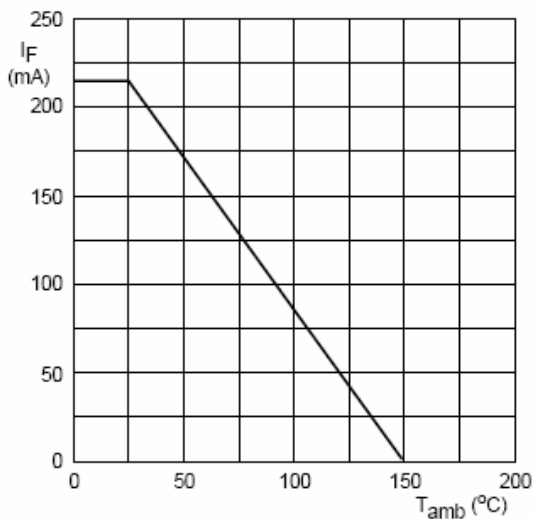
## Surface mount switching diode

## BAS28

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

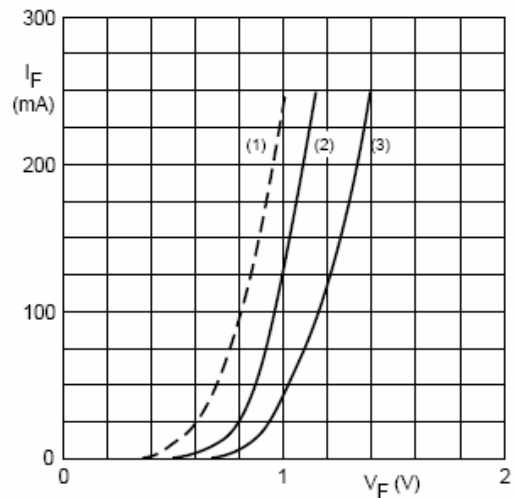
Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	-	V	$I_R = 100\mu A$
Forward Voltage	$V_F$	-	-	0.715 0.855 1.0 1.25	V	$I_F = 1mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 100mA$
Reverse Leakage Current	$I_R$	-	-	0.03 1.0	$\mu A$	$V_R = 25V$ $V_R = 75V$
Diodes Capacitance	$C_d$	-	-	1.5	pF	$V_R = 0V, f = 1.0MHz$
Reverse Recovery Time	$t_{rr}$	-	-	4.0	ns	$I_F = I_R = 10mA, I_{rr} = 0.1 \cdot I_R$

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



Device mounted on an FR4 printed-circuit board.

Maximum permissible continuous forward current as a function of ambient temperature.



- (1) T<sub>j</sub> = 150 °C; typical values.
- (2) T<sub>j</sub> = 25 °C; typical values.
- (3) T<sub>j</sub> = 25 °C; maximum values.

Fig.3 Forward current as a function of forward voltage.

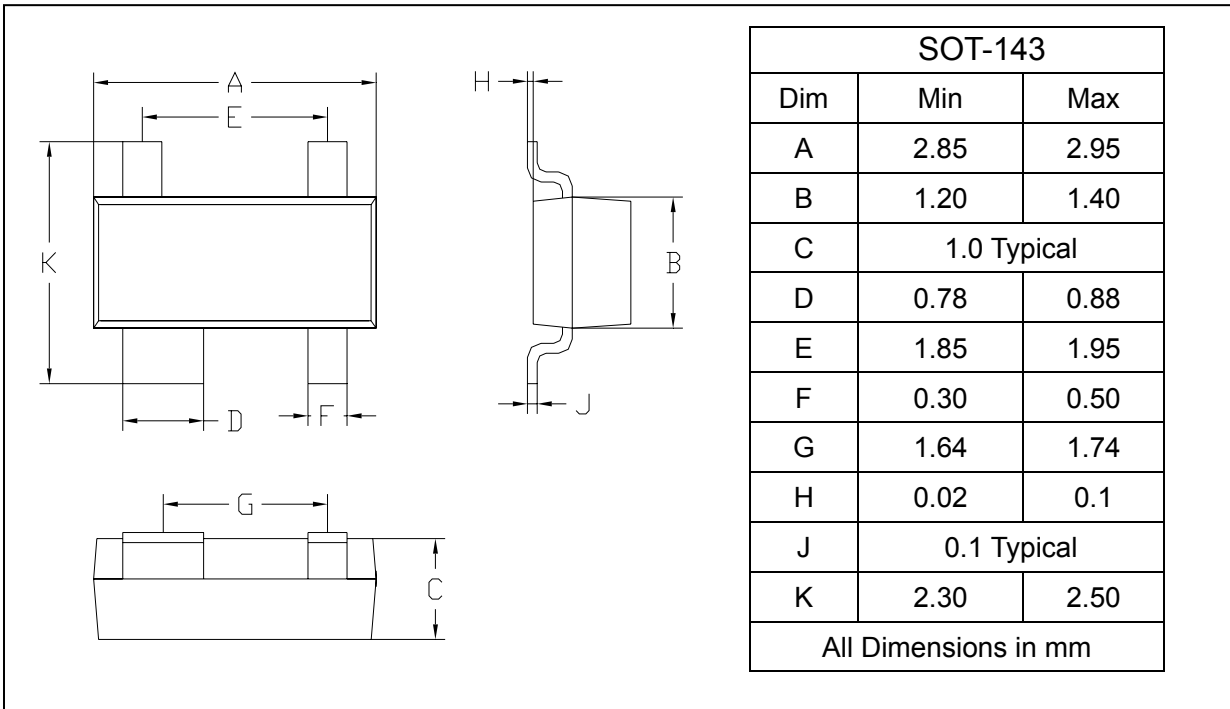
## Surface mount switching diode

## BAS28

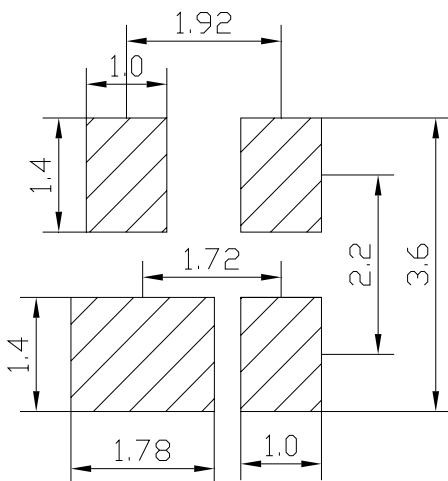
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-143



### SOLDERING FOOTPRINT



Unit : mm

### PACKAGE INFORMATION

Device	Package	Shipping
BAS28	SOT-143	3000/ Tape&Reel