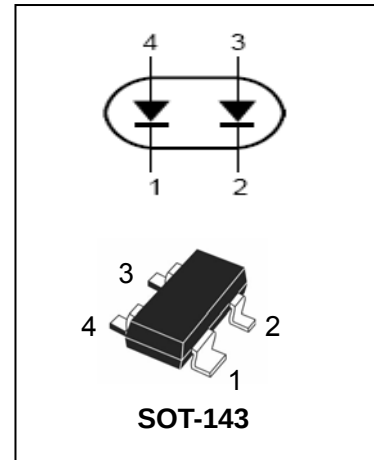


Surface mount switching diode**BAS28****FEATURES**

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



Lead-free

**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 t=1μs t=1ms t=1s	I_{FSM}	4 1 0.5	A
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

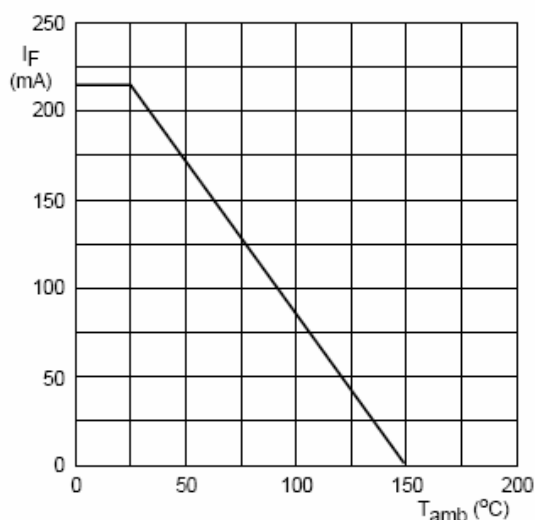
Surface mount switching diode

BAS28

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

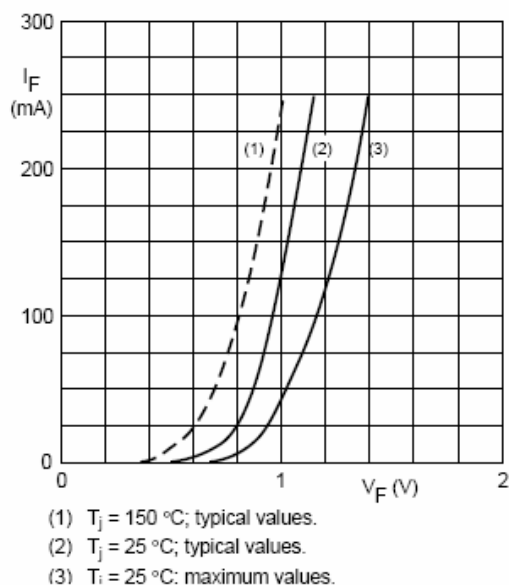
Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	-	V	$I_R=100\mu\text{A}$
Forward Voltage	V_F	-	-	0.715 0.855 1.0 1.25	V	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=100\text{mA}$
Reverse Leakage Current	I_R	-	-	0.03 1.0	μA	$V_R=25\text{V}$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

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



Device mounted on an FR4 printed-circuit board.

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



(1) $T_j = 150^\circ\text{C}$; typical values.

(2) $T_j = 25^\circ\text{C}$; typical values.

(3) $T_j = 25^\circ\text{C}$; maximum values.

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

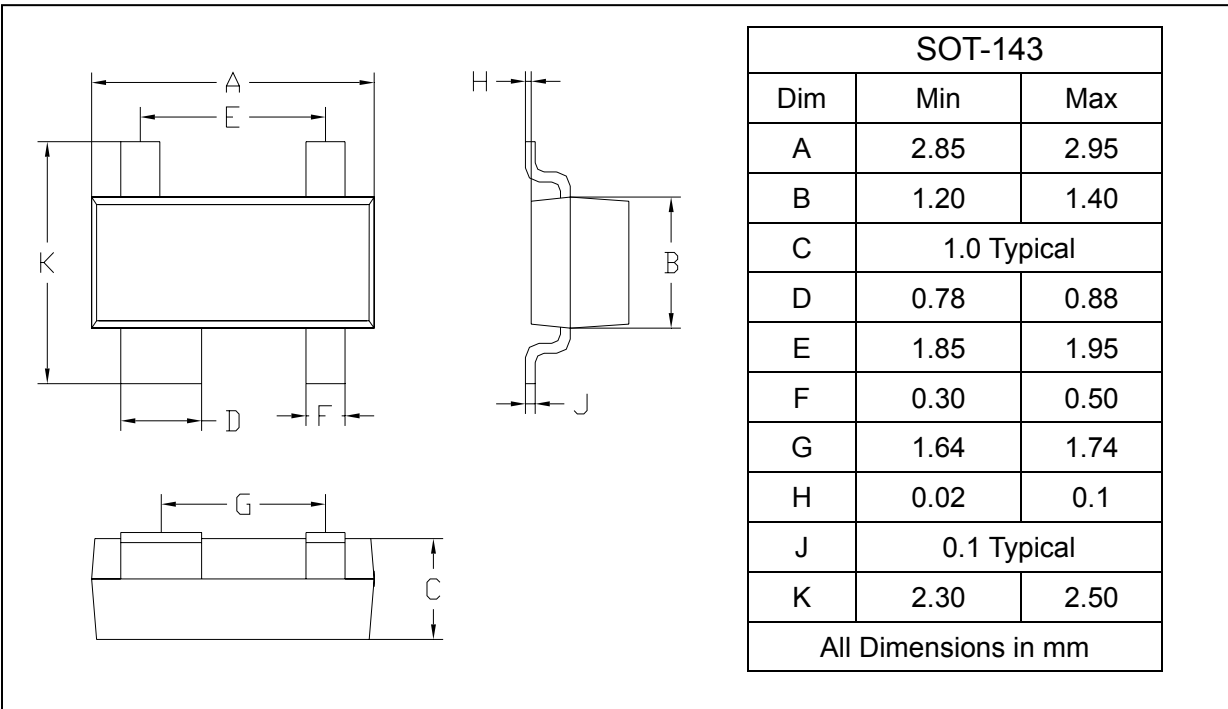
Surface mount switching diode

BAS28

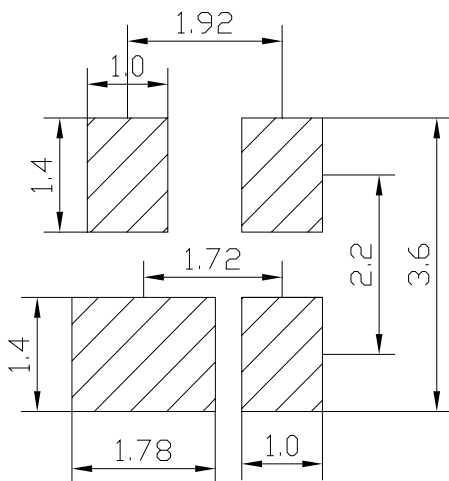
PACKAGE OUTLINE

Plastic surface mounted package

SOT-143



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

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