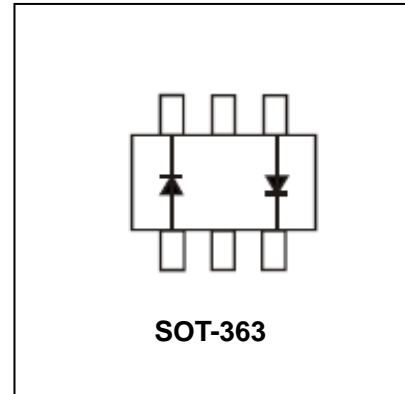


Surface Mount Fast Switching Diodes

BAS20DW

FEATURES

- Fast switching speed.
- Surface Mount Package Ideally Suited for Automated Insertion.
- High Reverse Breakdown Voltage.
- Low Leakage Current.



APPLICATIONS

- For general purpose switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
BAS20DW	KT2	SOT-363

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Characteristic	Value	Unit
V_{RRM}	Repetitive peak reverse voltage	200	V
V_{RWM}	Working peak reverse voltage	150	V
V_R	DC Blocking voltage	150	V
$V_{R(RMS)}$	RMS Reverse voltage	106	V
I_0	Average Rectified Output Current	200	mA
I_{FSM}	Non-repetitive peak forward surge current	@t=1.0µs	2.5
		@t=1.0s	0.5
I_{FRM}	Repetitive Peak Forward Surge Current	625	mA
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient Air	625	°C/W
T_j, T_{stg}	Junction and Storage Temperature	-65 to +150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



Surface Mount Fast Switching Diodes

BAS20DW

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$	200	-	V
Forward voltage	V_F	$I_F=100mA$ $I_F=200mA$	-	1.0 1.25	V
Peak Reverse Current	I_R	$V_R=200V, T_j=25^\circ C$ $V_R=200V, T_j=100^\circ C$	-	100 15	nA uA
Total Capacitance	C_T	$V_R=0V, f=1.0MHz$	-	5.0	pF
Reverse Recovery time	t_{rr}	$I_F=I_R=30mA, I_{rr}=0.1 \cdot I_R,$ $R_L=100\Omega$	-	50	ns

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

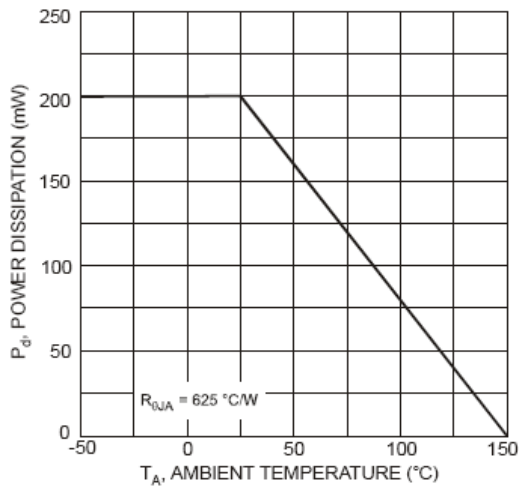


Fig. 1 Derating Curve - Total

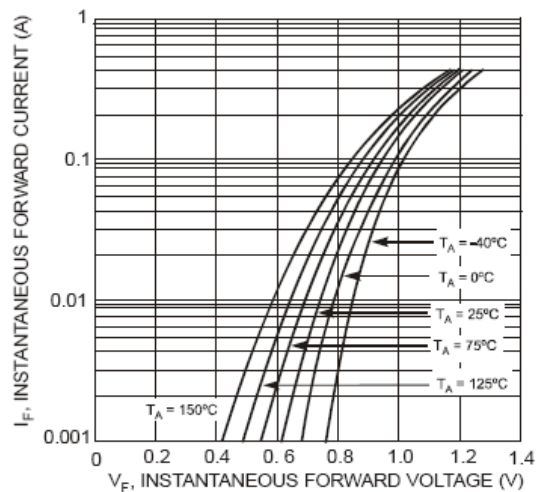


Fig. 2 Typical Forward Characteristics

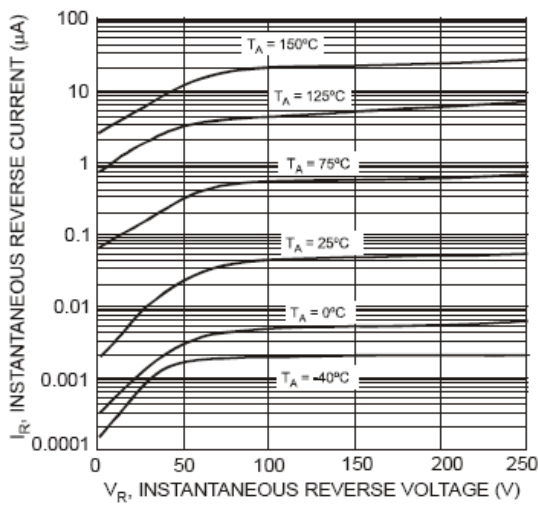


Fig. 3 Typical Reverse Characteristics

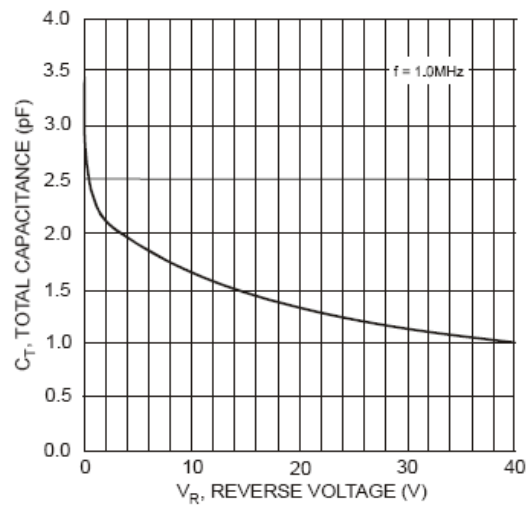


Fig. 4 Typical Capacitance vs. Reverse Voltage

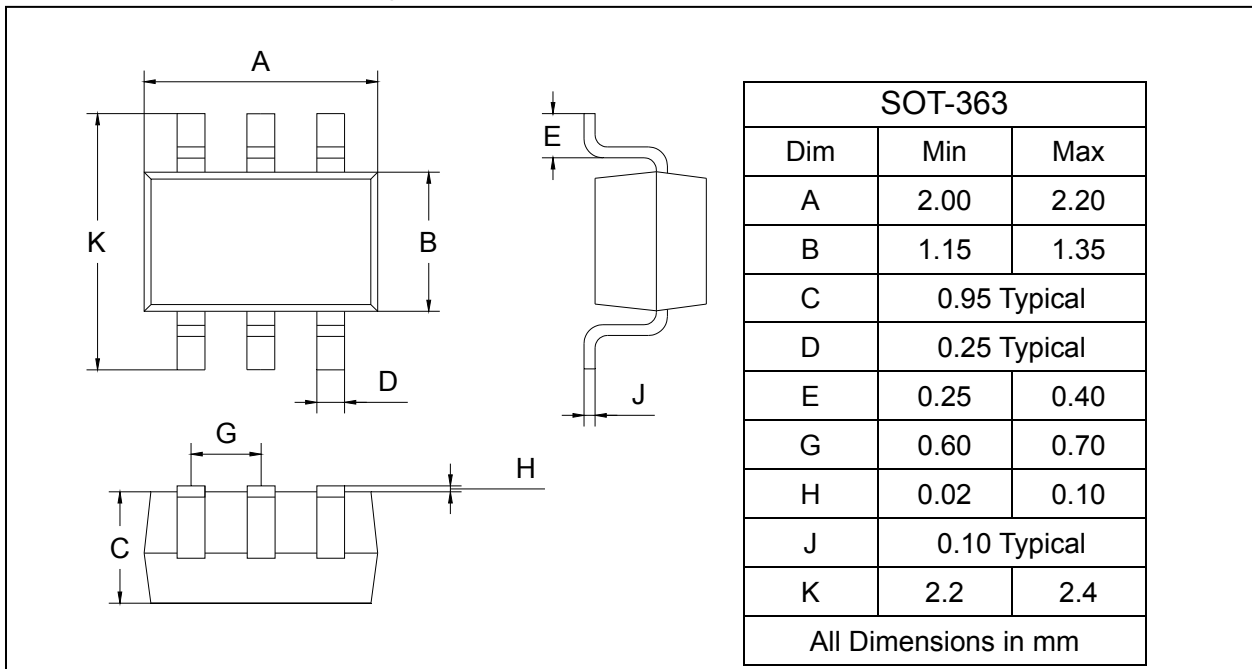
PACKAGE OUTLINE

Surface Mount Fast Switching Diodes

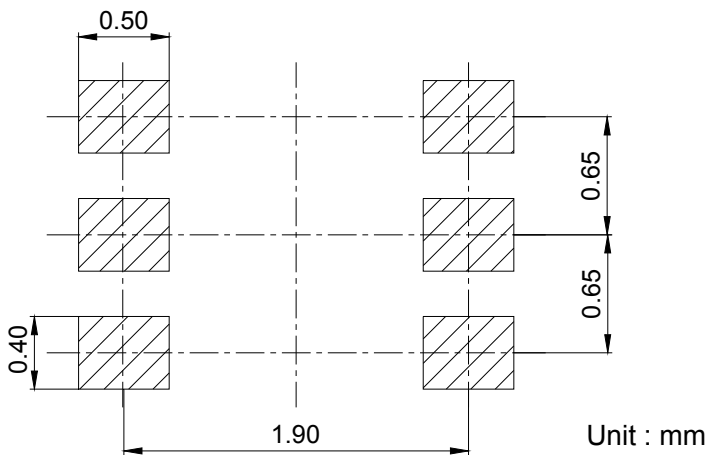
BAS20DW

Plastic surface mounted package

SOT-363



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BAS20DW	SOT-363	3000/Tape&Reel