

Surface Mount Schottky Barrier Diodes

BAS70TW/DW-04/DW-05/DW-06/BRW

FEATURES

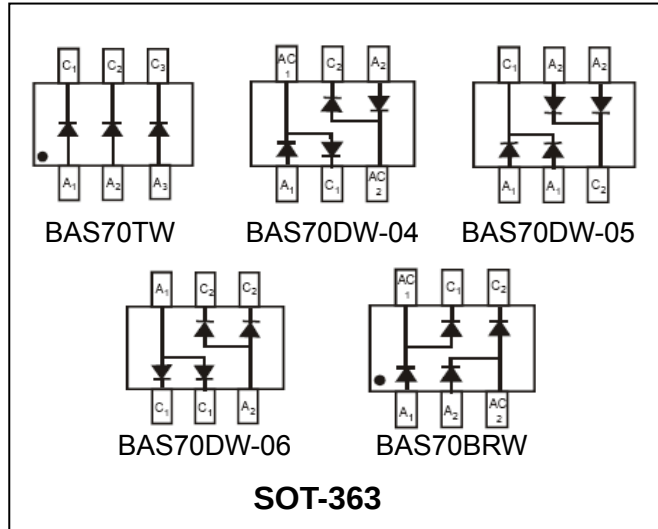
- Fast switching .
- Low Forward Voltage Drop.
- Ultra-small surface mount package.
- PN Junction Guard Ring for Transient and ESD Protection.



Lead-free

APPLICATIONS

- For general purpose switching application.



ORDERING INFORMATION

Type No.	Marking	Package Code
BAS70TW	K73	SOT-363
BAS70DW-04	K74	SOT-363
BAS70DW-05	K71	SOT-363
BAS70DW-06	K76	SOT-363
BAS70BRW	K75	SOT-363

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Characteristic	Value	Unit
$V_{R(RMS)}$	RMS Reverse Voltage	49	V
V_{RRM} V_{RWM} V_R	Peak repetitive reverse Voltage Working peak reverse voltage DC reverse voltage	70	V
I_{FM}	Forward continuous current	70	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @t<1.0s	100	mA
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	625	°C/W
T_J T_{STG}	Operating and Storage Temperature Range	-55 to +150 -65 to +150	°C



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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=10\mu\text{A}$	70	-	V
Forward voltage	V_F	$t_p<300\mu\text{s}, I_F=1.0\text{mA}$ $t_p<300\mu\text{s}, I_F=15\text{mA}$	-	0.41 1	V
Reverse Current	I_R	$t_p<300\mu\text{s}, V_R=50\text{V}$	-	100	nA
Total Capacitance	C_T	$V_R=0, f=1.0\text{MHz}$	-	2.0	pF
Reverse Recovery time	t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1*I_R, R_L=100\Omega$	-	5.0	ns

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

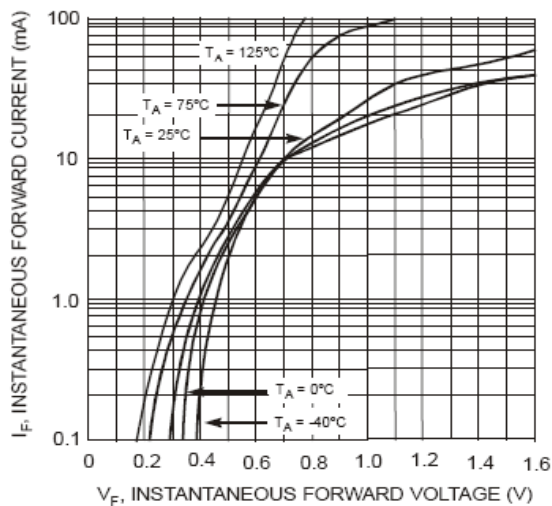


Fig. 1 Typical Forward Characteristics

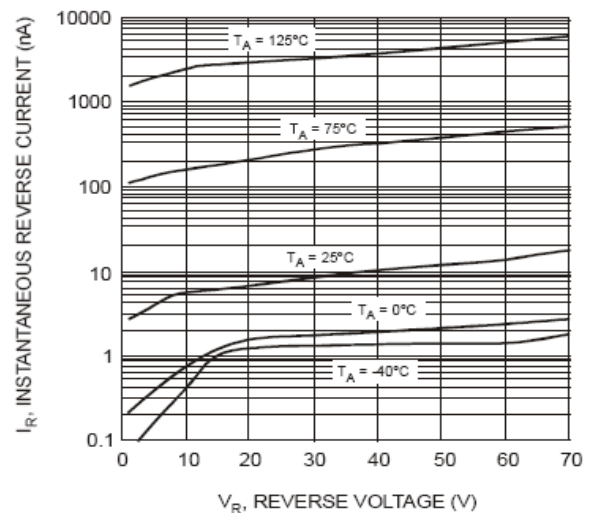


Fig. 2 Typical Reverse Characteristics

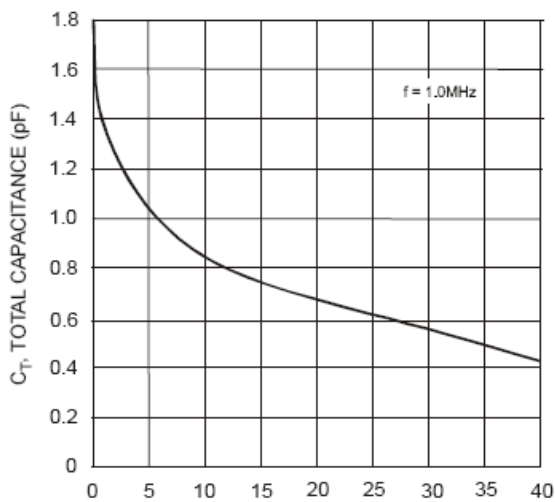


Fig. 3 Typical Capacitance

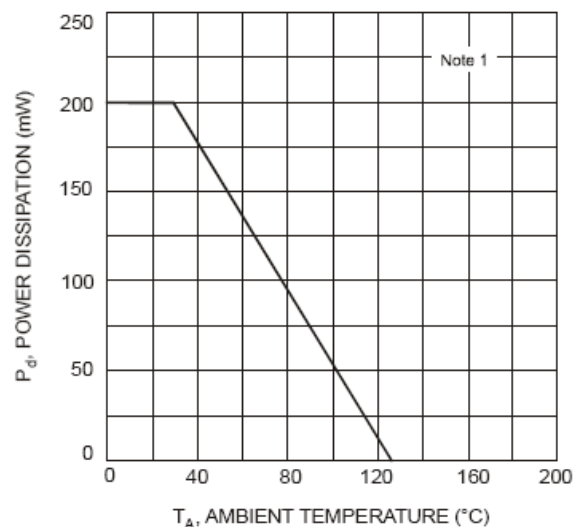


Fig. 4 Power Derating Curve, Total Package

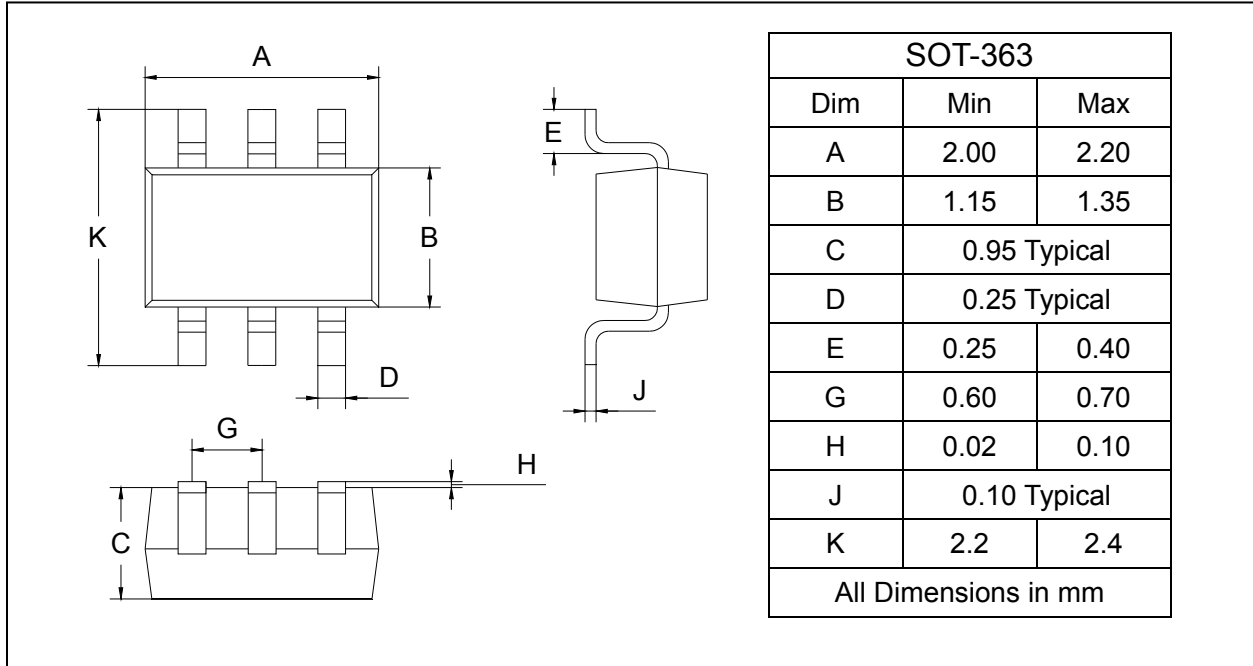
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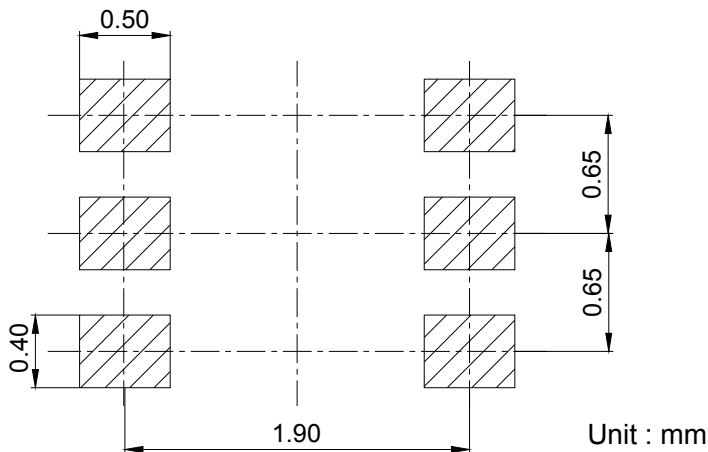
PACKAGE OUTLINE

Plastic surface mounted package

SOT-363



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BAS70TW/DW-04/DW-05/DW-06/BRW	SOT-363	3000/Tape&Reel