



Surface Mount Schottky Barrier Diodes

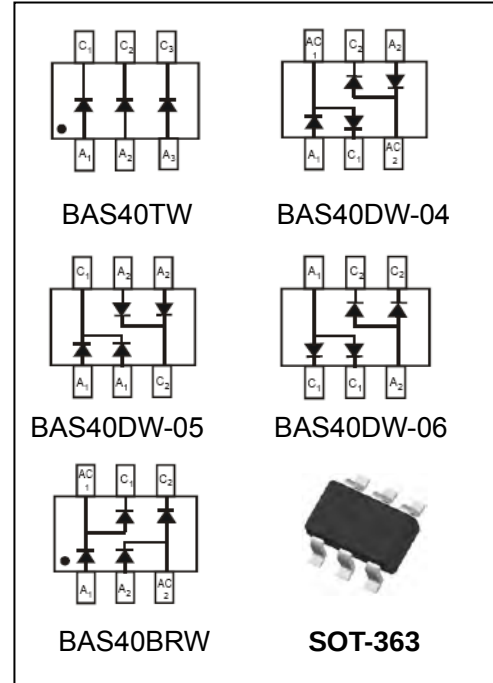
BAS40TW/DW-04/DW-05/DW-06/BRW

FEATURES

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



Lead-free



ORDERING INFORMATION

Type No.	Marking	Package Code
BAS40TW	K43	SOT-363
BAS40DW-04	K44	SOT-363
BAS40DW-05	K45	SOT-363
BAS40DW-06	K46	SOT-363
BAS40BRW	K47	SOT-363

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Characteristic	Value	Unit
V_{RRM}	Peak repetitive reverse Voltage	40	V
V_{RWM}	Working peak reverse voltage		
V_R	DC reverse voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_{FM}	Forward continuous current	200	mA
I_{FSM}	Non-Repetitive peak forward surge current @t<1.0μs	0.6 1.0	A
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	625	°C/W
T_j	Operating Temperature Range	-55 to +150	°C
T_{stg}	Storage Temperature Range	-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	$V_{(BR)R}$	$I_R=10\mu\text{A}$	40	-	V
Forward voltage	V_F	$I_F=1.0\text{mA}$ $I_F=40\text{mA}$	-	0.38 1	V
Reverse Current	I_R	$V_R=30\text{V}$	-	200	nA
Total Capacitance	C_T	$V_R=0, f=1.0\text{MHz}$	-	5.0	pF
Reverse Recovery time	t_{rr}	$I_F=I_R=10\text{mA}, I_{tr}=0.1 \cdot I_R, R_L=100\Omega$	-	5.0	ns

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

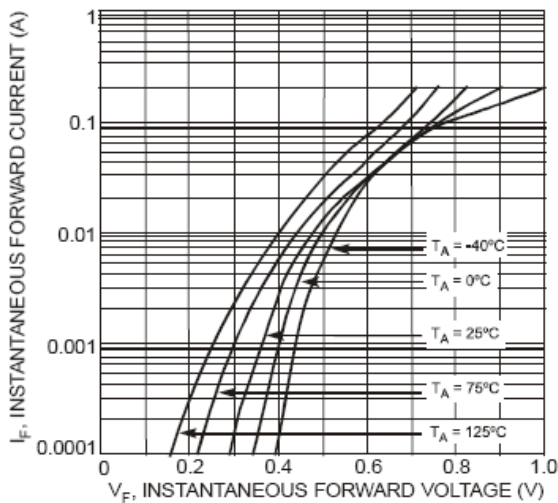


Fig. 1 Typical Forward Characteristics

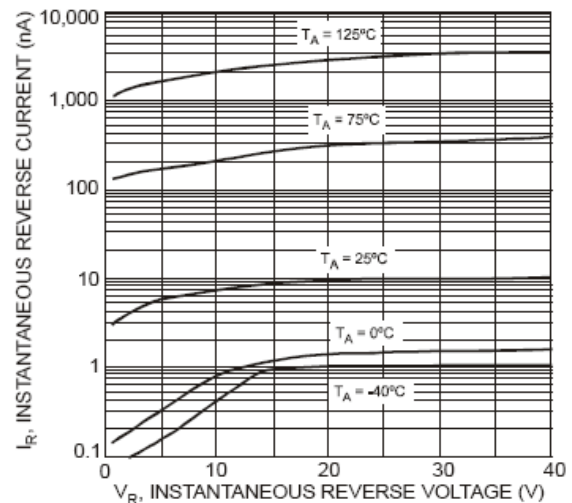


Fig. 2 Typical Reverse Characteristics

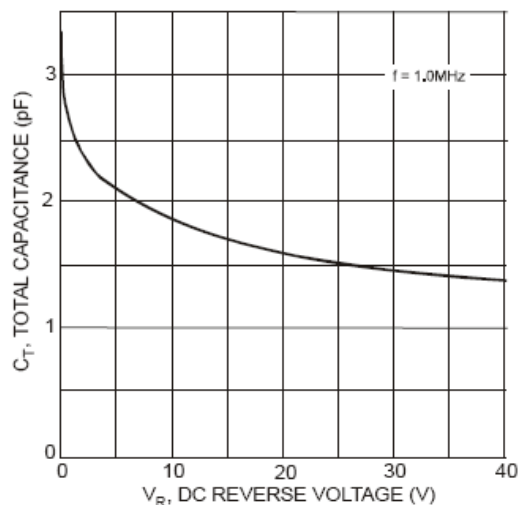


Fig. 3 Total Capacitance vs. Reverse Voltage

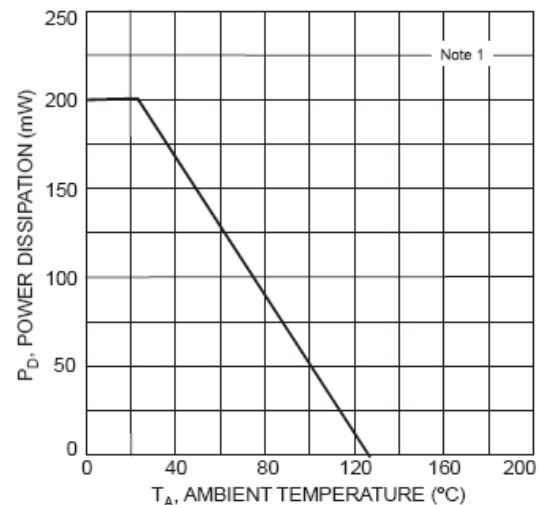


Fig. 4 Power Derating Curve, Total Package

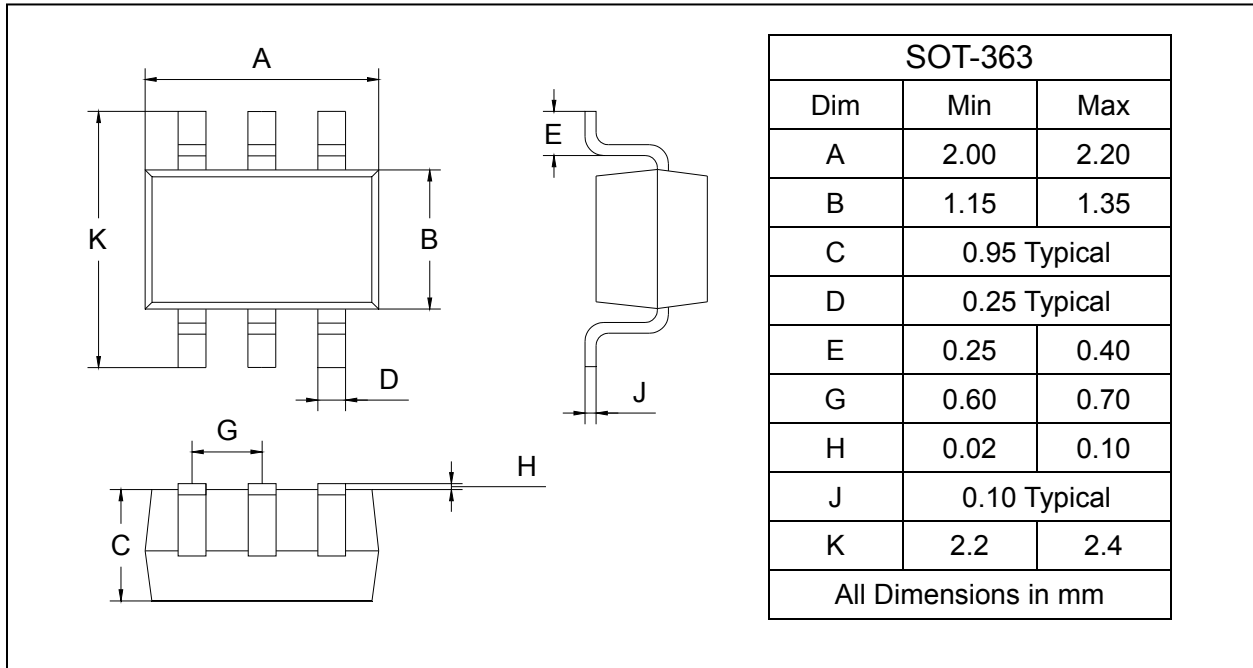
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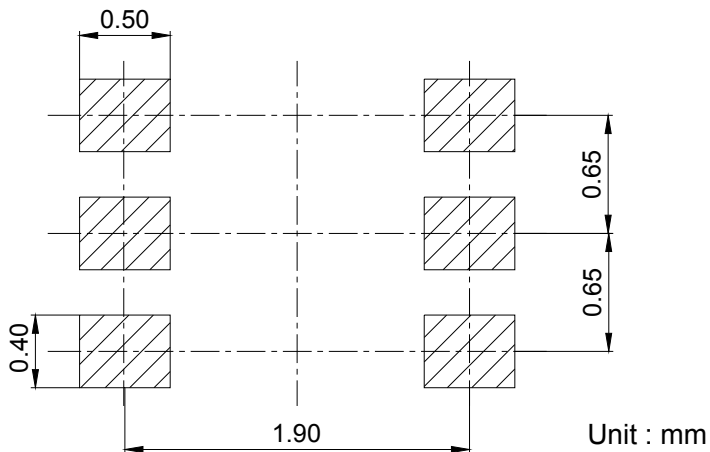
PACKAGE OUTLINE

Plastic surface mounted package

SOT-363



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BAS40TW/DW-04/DW-05/DW-06	SOT-363	3000/Tape&Reel