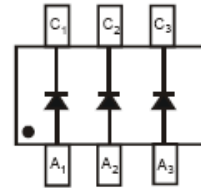
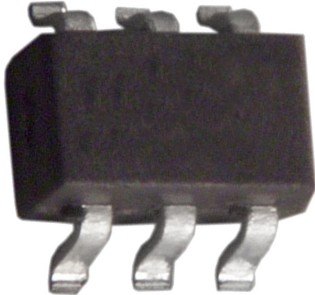
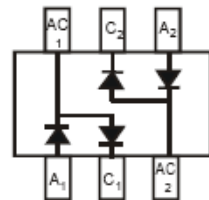


# Surface Mount Schottky Barrier Diode



BAS40TW-7-F



BAS40DW-04-7-F

SOT-363

## Features:

- Fast Switching
- Low Forward Voltage Drop
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection

## Maximum Ratings:

Ratings at 25°C unless otherwise specified.

Characteristics	Symbol	Value	Unit
RMS reverse voltage	$V_{R(RMS)}$	28	V
Peak repetitive reverse voltage	$V_{RRM}$	40	V
Working peak reverse voltage	$V_{RWM}$		
DC reverse voltage	$V_R$		
Forward continuous current	$I_{FM}$	200	mA
Average rectified output current	$I_o$	1	A
Non-repetitive peak forward surge current at $t < 1\mu s$	$I_{FSM}$	0.6 1	A
Power dissipation	$P_D$	200	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	625	°C/W
Storage temperature	$T_j, T_{STG}$	-55 to +150	°C

# Surface Mount Schottky Barrier Diode



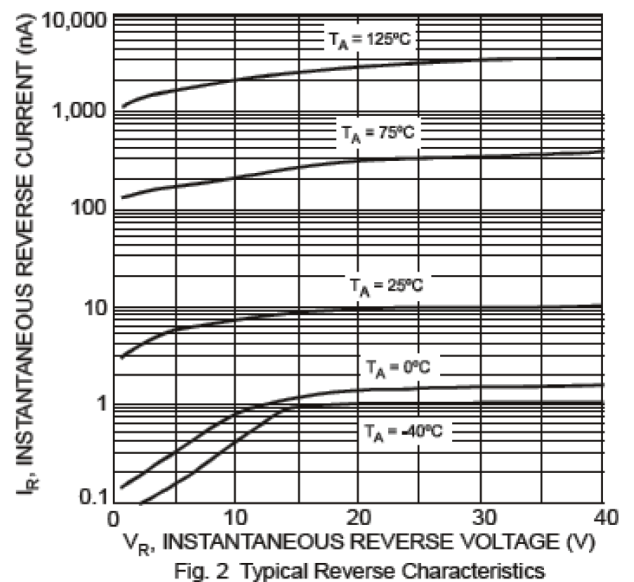
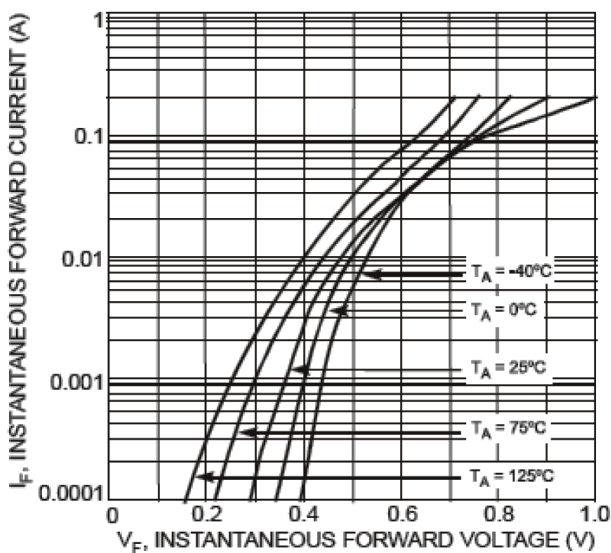
## Electrical Characteristics:

Ratings at 25°C unless otherwise specified

Parameter	Symbol	Min.	Max.	Unit	Test Condition
Reverse breakdown voltage	$V_{(BR)R}$	40	-	V	$I_R=10\mu A$
Forward voltage	$V_F$	-	0.38 1	V	$I_F=1mA$ $I_F=40mA$
Reverse current	$I_R$	-	200	nA	$V_R=30V$
Total capacitance	$C_T$	-	5	pF	$V_R=0V, f=1MHz$
Reverse recovery time	$T_{rr}$	-	5	nS	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$

## Typical Characteristics:

$T_A = 25^\circ C$  unless otherwise specified



# Surface Mount Schottky Barrier Diode

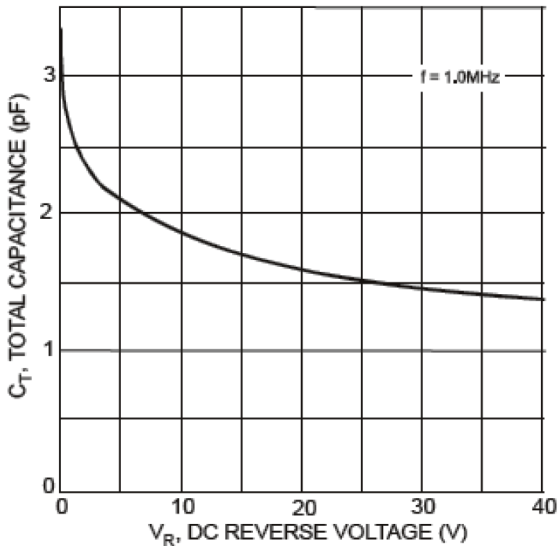


Fig. 3 Total Capacitance vs. Reverse Voltage

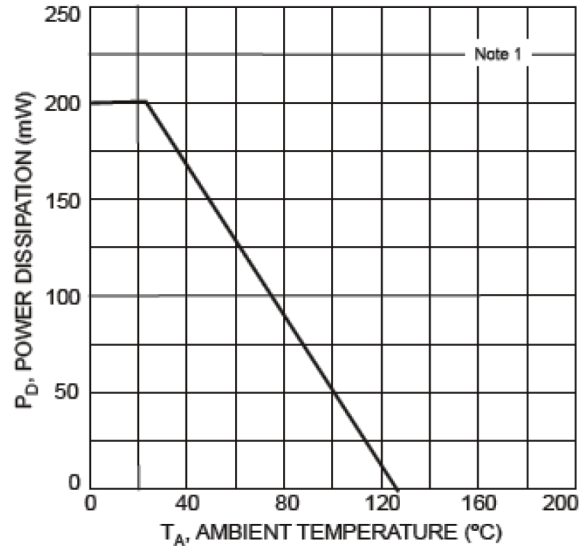
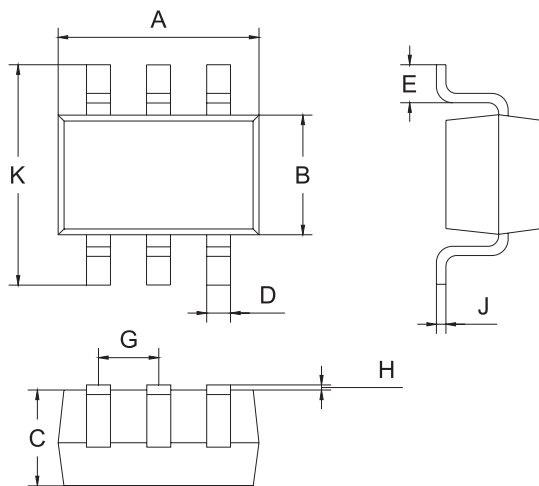


Fig. 4 Power Derating Curve, Total Package

## Package Outline:

Plastic surface mounted package



SOT-363		
Dim.	Min.	Max.
A	2	2.2
B	1.55	1.35
C	0.95 Typ.	
D	0.25 Typ.	
E	0.25	0.4
G	0.6	0.7
H	0.02	0.1
J	0.1 Typ.	
K	2.2	2.4

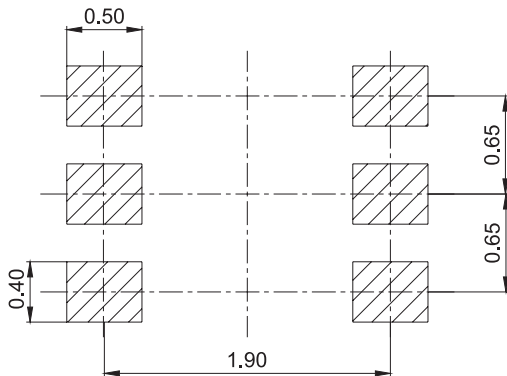
Dimensions : Millimetres



# Surface Mount Schottky Barrier Diode



## Soldering Footprint:



Dimensions : Millimetres

## Package Information:

Device	Package	Shipping
BAS40TW-7-F & BAS40DW-04-7-F	SOT-363	3,000 / Tape & Reel

## Part Number Table

Description	Part Number
Surface Mount Schottky Barrier Diode	BAS40TW-7-F
	BAS40DW-04-7-F

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