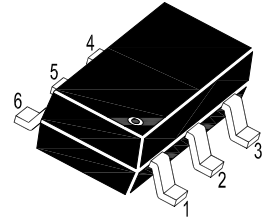


BAS40DW / SDW / CDW / ADW / BRDW

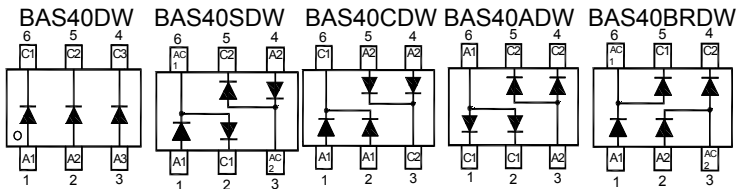
Surface Mount Schottky Barrier Diode

Features

- Low forward voltage
- Fast switching



Marking Code
 BAS40DW:4A BAS40SDW:4B
 BAS40CDW:4C BAS40ADW:4D
 BAS40BRDW:4E
 SOT-363 Plastic package



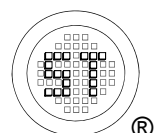
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Reverse Stand-Off Voltage	V_{RWM}	40	V
Reverse Voltage	V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Forward Continuous Current ¹⁾	I_{FM}	200	mA
Peak Forward Surge Current (at $t < 1$ s)	I_{FSM}	600	mA
Power Dissipation ¹⁾	P_D	200	mW
Junction Temperature	T_J	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 125	$^\circ\text{C}$

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient ¹⁾	$R_{\theta JA}$	500	$^\circ\text{C/W}$

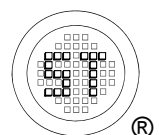
¹⁾ Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.



BAS40DW / SDW / CDW / ADW / BRDW

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 40 \text{ mA}$	V_F	- -	380 1000	mV
Reverse Breakdown Voltage at $I_R = 10 \mu\text{A}$	$V_{(BR)R}$	40	-	V
Reverse Current at $V_R = 30 \text{ V}$	I_R	-	200	nA
Total Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$	C_T	-	5	pF
Reverse Recovery Time at $I_F = I_R = 10 \text{ mA}$, $I_{rr} = 0.1 \times I_R$, $R_L = 100 \Omega$	t_{rr}	-	5	ns



BAS40DW / SDW / CDW / ADW / BRDW

Electrical Characteristics Curves

Fig 1. Reverse Characteristics Curve

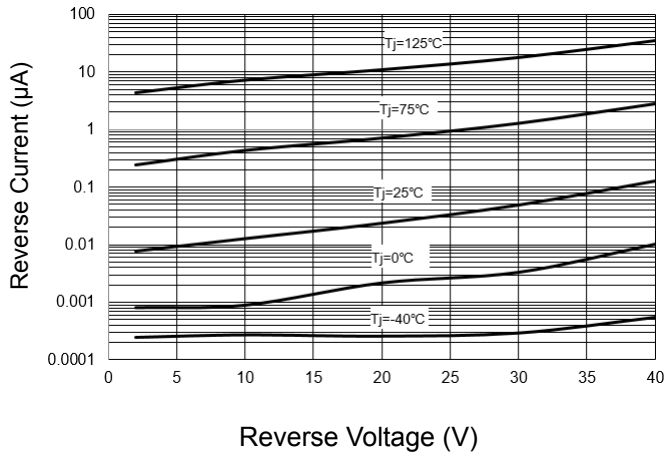


Fig 2. Forward Characteristics Curve

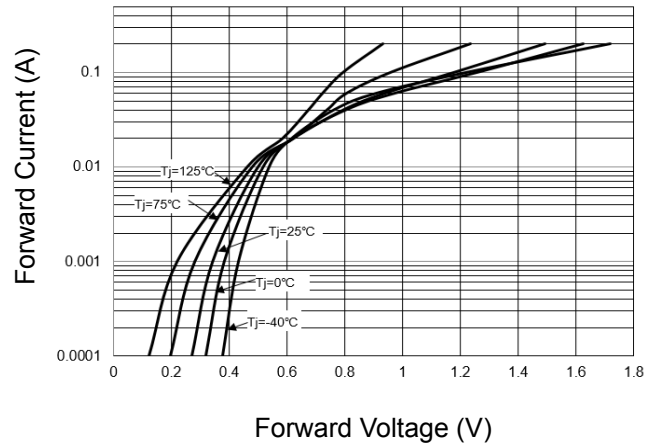


Fig 3. Junction Capacitance

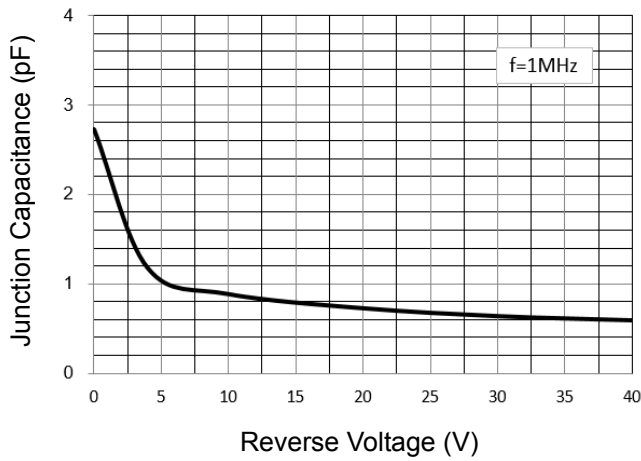
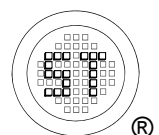
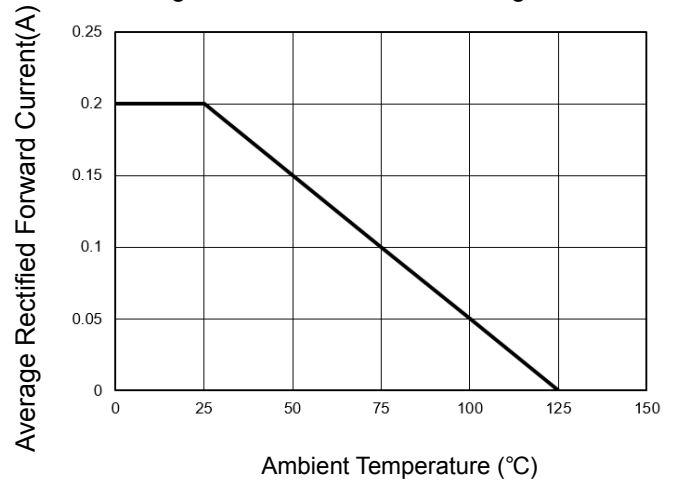


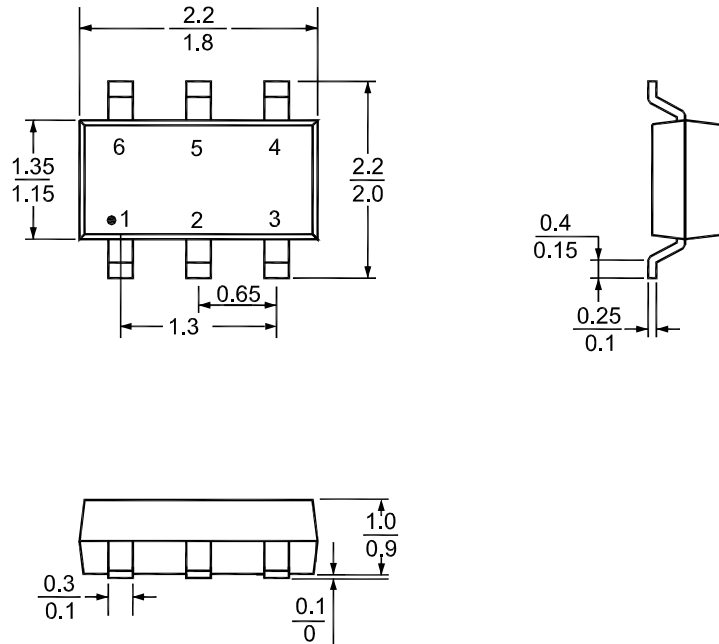
Fig 4. Forward Current Derating Curve



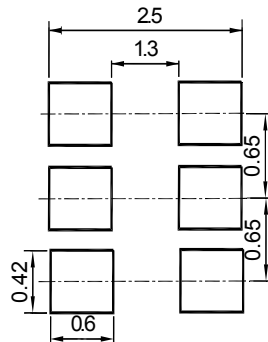
BAS40DW / SDW / CDW / ADW / BRDW

Package Outline Dimensions (Units: mm)

SOT-363



Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-363	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

"**" = Part No.
 "YM" = Date Code Marking
 "Y" = Year
 "M" = Month
 Font type: Arial

