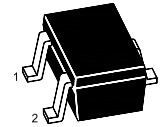


## BAS40W / -04W / -05W / -06W

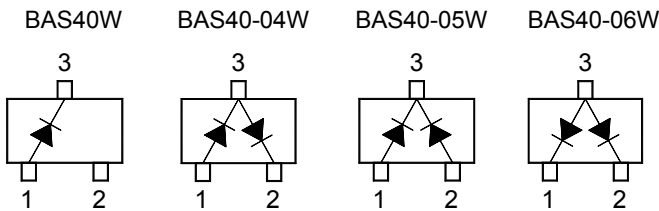
### SURFACE MOUNT SCHOTTKY BARRIER DIODE

#### Features

- Low forward voltage
- Fast switching



SOT-323 Plastic Package



BAS40W	Marking Code: <b>43</b>
BAS40-04W	Marking Code: <b>44</b>
BAS40-05W	Marking Code: <b>45</b>
BAS40-06W	Marking Code: <b>46</b>

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V
DC Blocking Voltage	$V_R$	40	V
Forward Continuous Current	$I_F$	200	mA
Peak Forward Surge Current (at $t_p \leq 8.3\text{ ms}$ )	$I_{FSM}$	600	mA
Power Dissipation	$P_d$	200	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{Stg}$	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 40\text{ mA}$	$V_F$	-	0.38	V
	$V_F$	-	1	V
Reverse Breakdown Voltage at $I_R = 10\text{ }\mu\text{A}$	$V_{(BR)R}$	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 $I_F = I_R = 10\text{ mA}$ , $I_{rr} = 0.1 I_R$	$t_{rr}$	-	5	ns

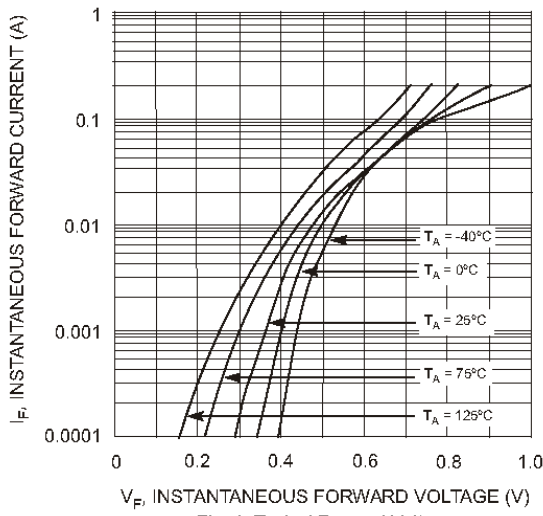


Fig. 1 Typical Forward Voltage

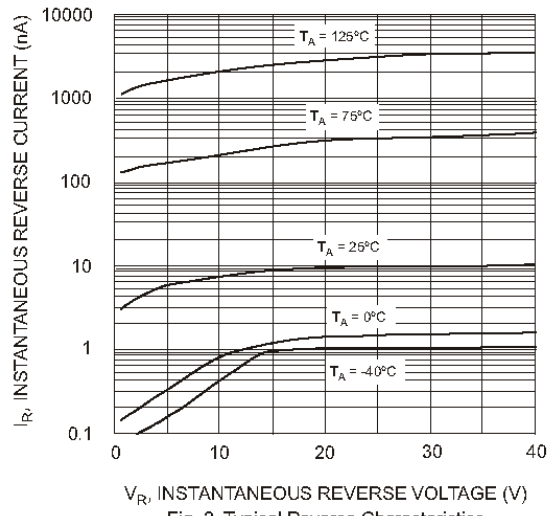


Fig. 2 Typical Reverse Characteristics

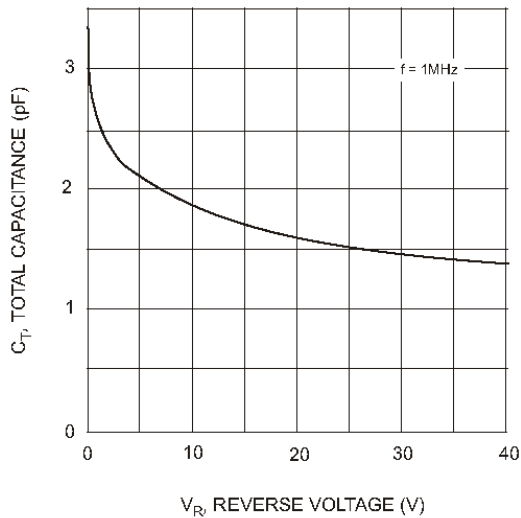


Fig. 3 Typical Capacitance

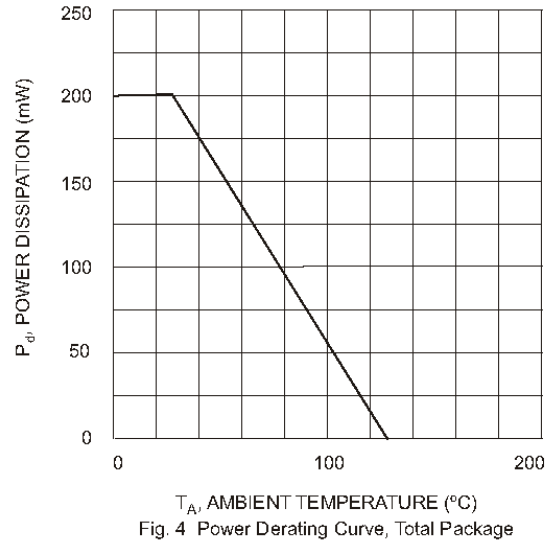


Fig. 4 Power Derating Curve, Total Package