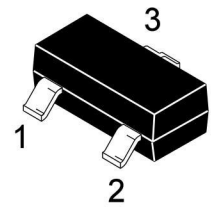


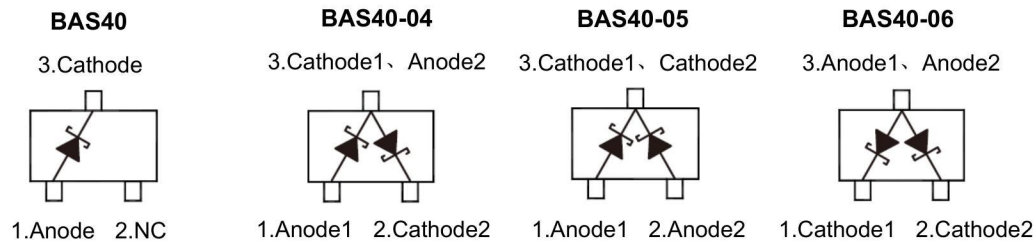
Features

- Low forward Voltage
- Fast switching

SOT-23



Equivalent Circuit



Marking Code :

BAS40 : B4
 BAS40-04 : B44
 BAS40-05 : B45
 BAS40-06 : B46

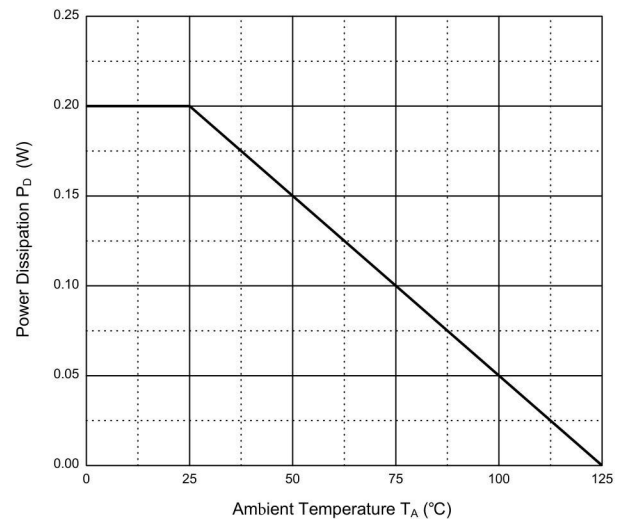
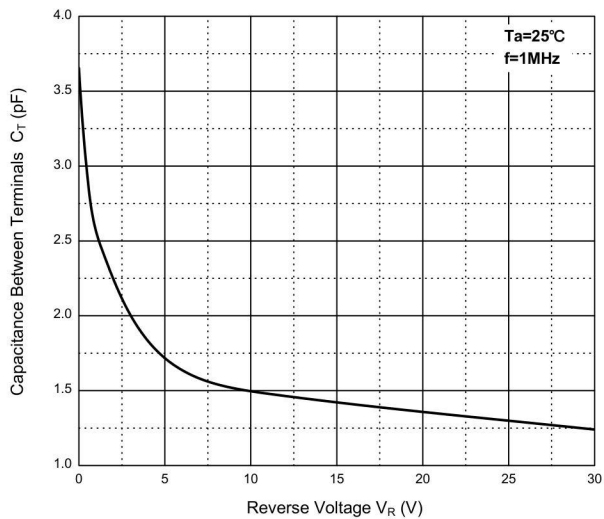
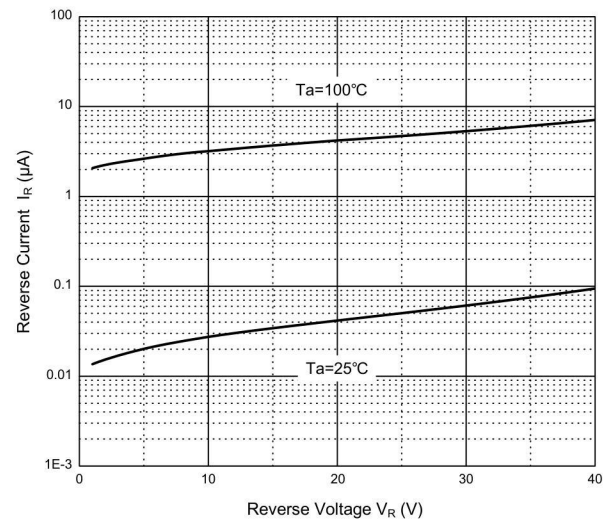
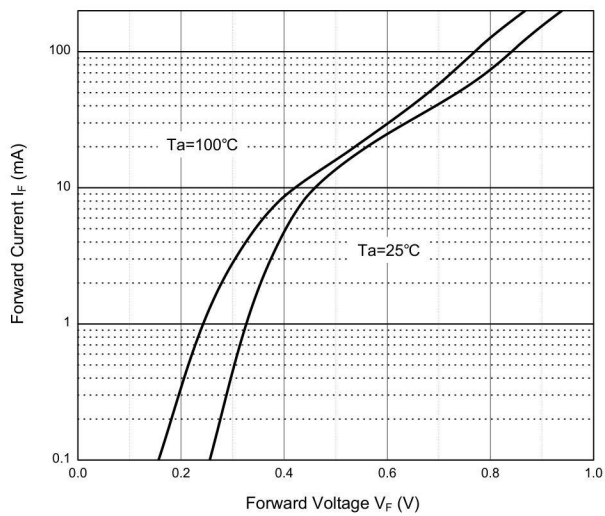
Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)

Parameter	Symbols	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-Repetitive Peak Forward Surge Current at 8.3ms	I_{FSM}	600	mA
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +125	$^\circ\text{C}$

Electrical Characteristics ($T_A=25^\circ\text{C}$)

Parameter	Symbols	Min.	Max.	Unit
Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 40 \text{ mA}$	V_F	-- --	0.38 1	V
Reverse Current at $V_R = 30 \text{ V}$	I_R	--	0.2	μA
Breakdown Voltage at $I_R = 10 \mu\text{A}$	$V_{R(BR)}$	40	--	V
Total Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$	C_T	--	5	pF
Reverse Recovery Time at $I_F = I_R = 5 \text{ mA}$, $I_{rr} = 0.1xI_R$, $R_L = 100 \Omega$	T_{rr}	--	5	ns

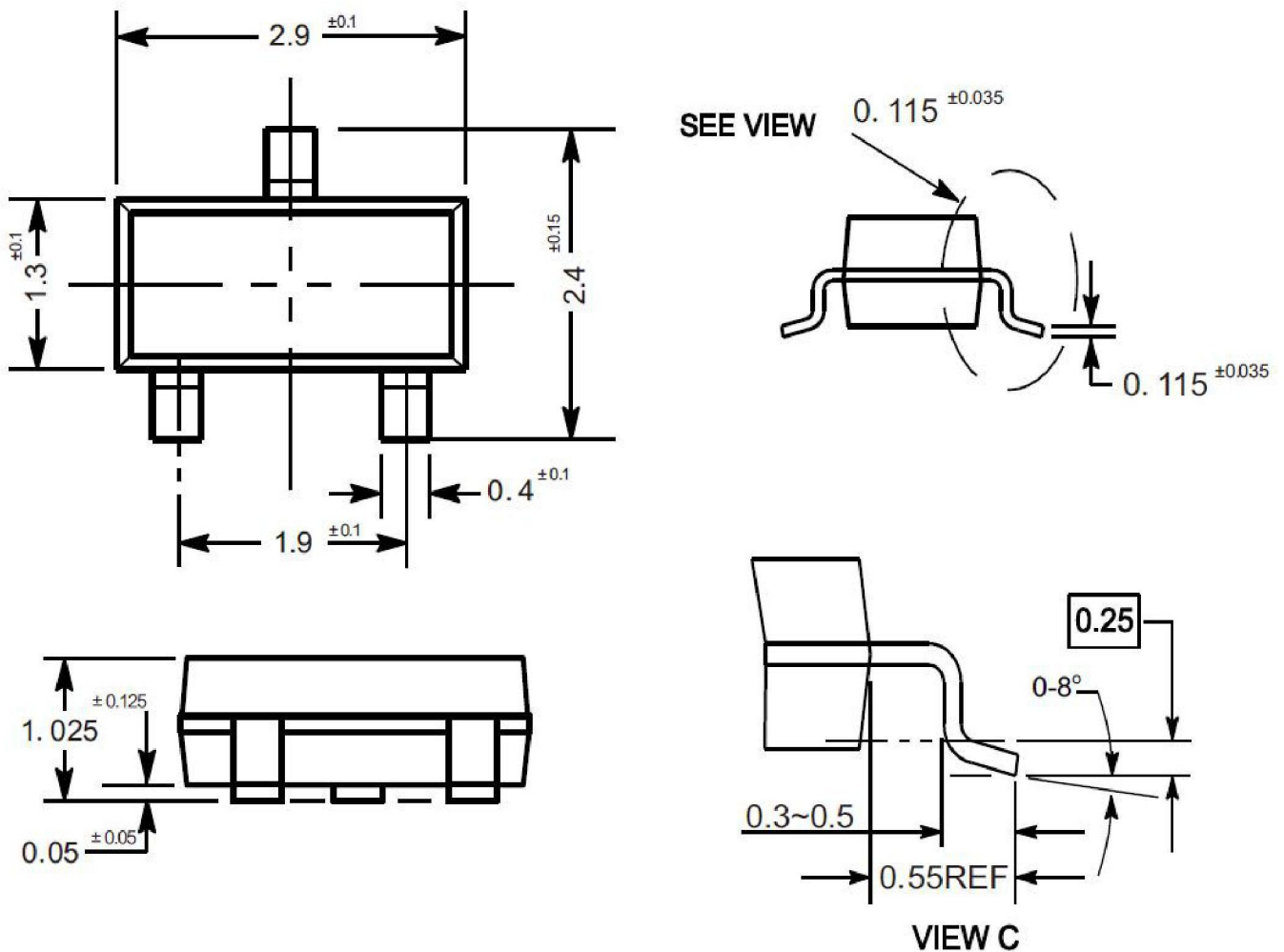
Typical Characteristic Curves



Package Outline

SOT-23

Dimensions in mm



Ordering Information

Device	Package	Shipping
BAS40/-04/-05/-06	SOT-23	3,000PCS/Reel&7inches