

Features

- Fast switching speed
- High conductance
- Halogen free
- Qualified to AEC-Q101 standards for high reliability

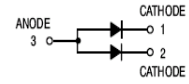
HF

Mechanical Data

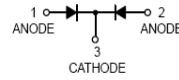
- Case: SOT-23
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208



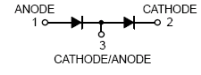
TBAS21



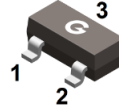
TBAS21A



TBAS21C



TBAS21S



SOT-23

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
TBAS21	SOT-23	3000 pcs / Tape & Reel	JS
TBAS21A	SOT-23	3000 pcs / Tape & Reel	JS2
TBAS21C	SOT-23	3000 pcs / Tape & Reel	JS3
TBAS21S	SOT-23	3000 pcs / Tape & Reel	JS4

Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage	V _{RRM}	250	V
Working Peak Reverse Voltage	V _{RWM}	200	V
DC Blocking Voltage	V _R	200	V
RMS Reverse Voltage	V _{R(RMS)}	141	V
Forward Continuous Current	I _F	200	mA
Non-Repetitive Peak Forward Surge Current, t = 8.3ms	I _{FSM}	2	A
Non-Repetitive Peak Forward Surge Current, t = 1ms	I _{FSM}	2.5	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	250	mW
Thermal Resistance Junction-to-Air	$R_{\theta JA}$	500	°C/W
Thermal Resistance Junction-to-Case	$R_{\theta JC}$	310	°C/W
Operating Junction Temperature Range	T_J	-65 ~ +150	°C
Storage Temperature Range	T_{STG}	-65 ~ +150	°C

Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 100\mu\text{A}$	250	-	-	V
Forward Voltage	V_F	$I_F = 100\text{mA}$	-	-	1.00	V
		$I_F = 200\text{mA}$	-	-	1.25	V
Maximum Peak Reverse Current	I_R	$V_R = 200\text{V}, T_J = 25^\circ\text{C}$	-	-	0.1	μA
		$V_R = 200\text{V}, T_J = 100^\circ\text{C}$	-	-	15	μA
Total Capacitance	C_J	$V_R = 0\text{V}, f = 1.0\text{MHz}$	-	-	5	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10\text{mA}$ $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$	-	-	50	ns

Ratings and Characteristics Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

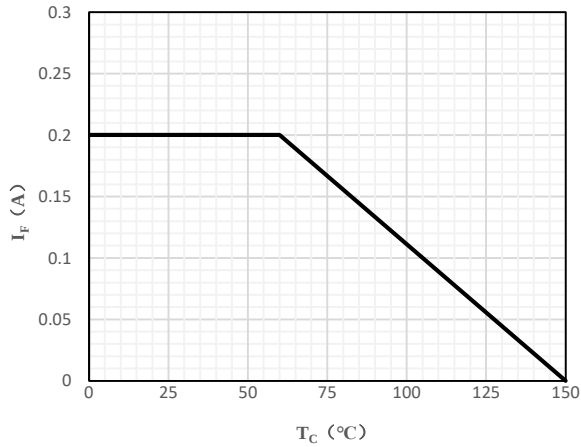


Fig 1 Derating Curve

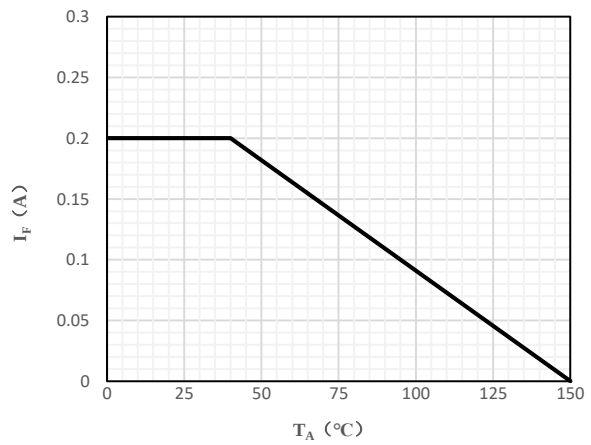


Fig 2 Derating Curve

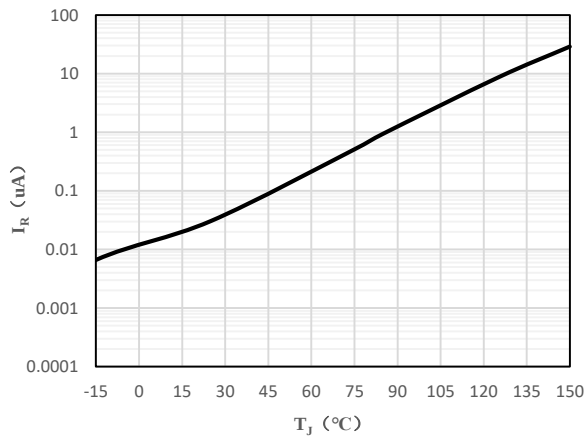


Fig 3 Reverse Current vs. Junction Temperature

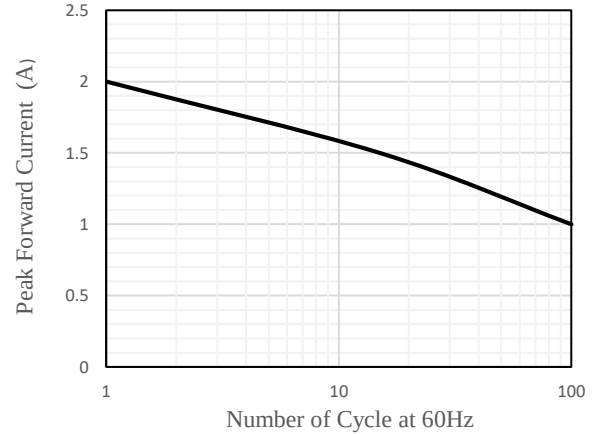


Fig 4 Surge Current Derating Curve

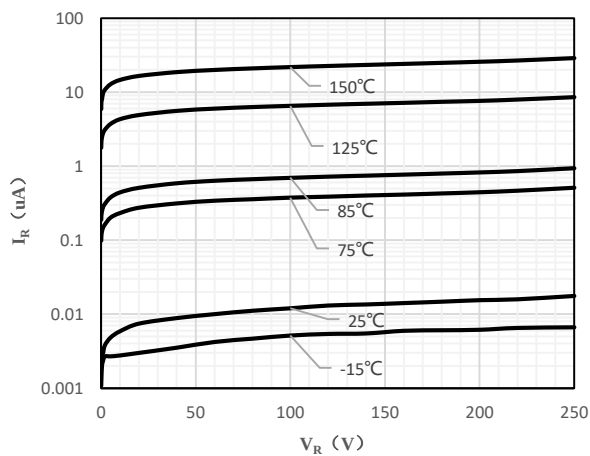


Fig 5 Typical Reverse Characteristic

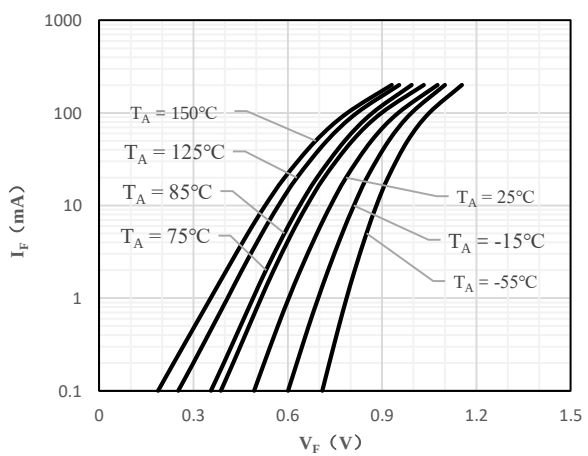


Fig 6 Typical Forward Characteristics

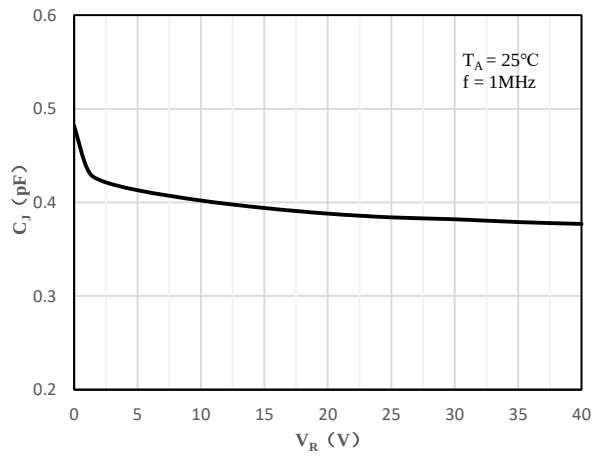
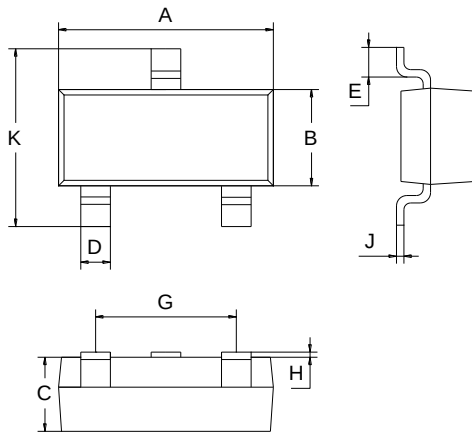


Fig 7 Capacitance Characteristics

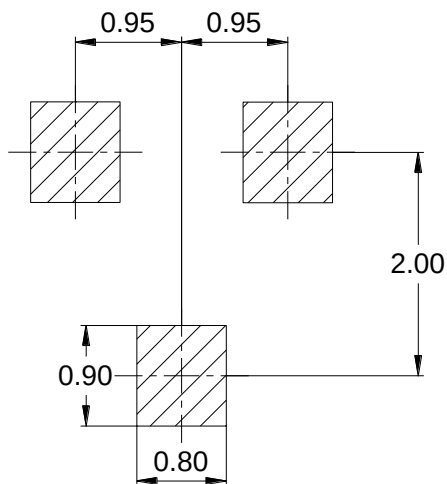
Package Outline Dimensions (Unit: mm)



SOT-23		
Dimension	Min.	Max.
A	2.70	3.10
B	1.10	1.50
C	0.9	1.1
D	0.3	0.5
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.05	0.15
K	2.20	2.60

Package Outline Dimensions (Unit: mm)

SOT-23



Important Notice

Changzhou Galaxy Century Microelectronics (GME) reserves the right to make changes without further notice to any product information (copyrighted) herein to make corrections, modifications, improvements, or other changes. GME does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others.