

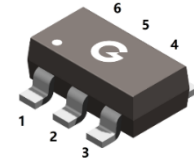
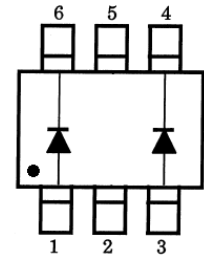
Features

- Fast switching speed
- High conductance
- RoHS compliant with Halogen-free
- Qualified to AEC-Q101 Standards

HF

Mechanical Data

- Case: SOT-23-6L
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208



SOT-23-6L

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
TS05G-6L	SOT-23-6L	3000 pcs / Tape & Reel	S05G

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

Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	400	V
DC Blocking Voltage	V_R	400	V
Average Rectified Output Current	I_F	0.5	A
Non-repetitive Peak Forward Surge Current, $t_p = 8.3\text{ms}$	I_{FSM}	8	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	300	mW
Thermal Resistance Junction-to-Air	$R_{\theta JA}$	417	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	-55 ~ +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^\circ\text{C}$

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

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 100\mu\text{A}$	400	-	-	V
Forward Voltage	V_F	$I_F = 0.5\text{A}$	-	-	1.1	V
Maximum Peak Reverse Current	I_R	$V_R = 400\text{V}$	-	-	5	μA

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

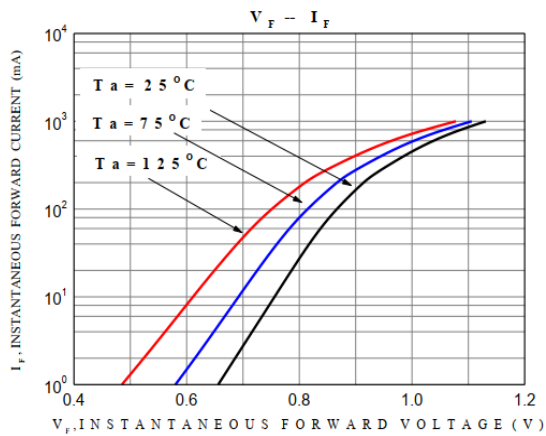


Fig 1 Typical Reverse Characteristic

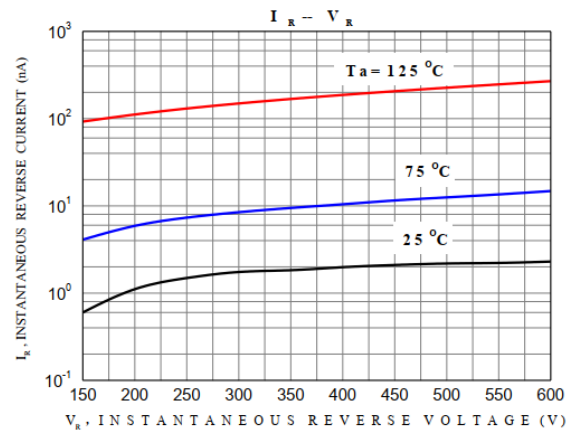
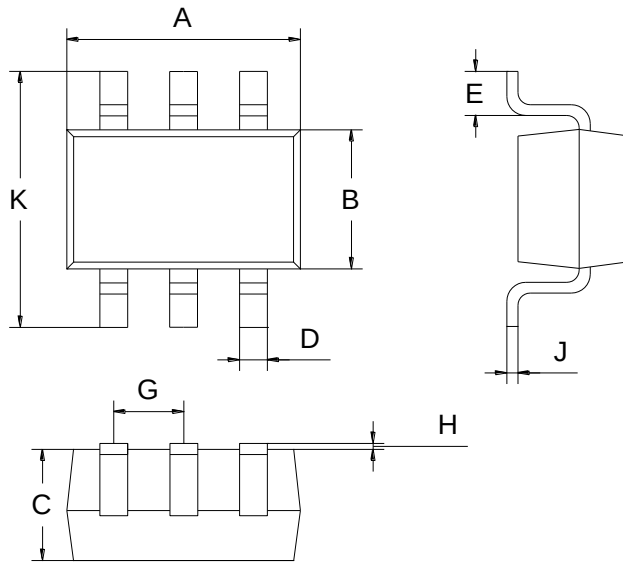


Fig 2 Typical Forward Characteristics

Package Outline Dimensions (Unit: mm)



SOT-23-6L		
Dimension	Min.	Max.
A	2.80	3.00
B	1.50	1.70
C	1.00	1.20
D	0.35	0.45
E	0.35	0.55
G	0.90	1.00
H	0.02	0.10
J	0.10	0.20
K	2.60	3.00

Mounting Pad Layout (Unit: mm)

SOT-23-6L

