

Features

- Low reverse current and low forward voltage
- High reliability
- Small surface mounting type

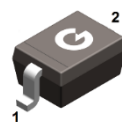
HF

Typical Applications

- Low current rectification

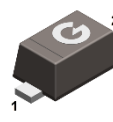
Mechanical Data

- Case: SOD-323, SOD-523, DFN1006-2
- Molding compound, UL flammability classification rating 94V-0
- Terminals: Tin plated leads, solderable per MIL-STD-202, Method 208



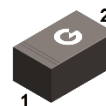
RB521V-30

SOD-323



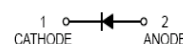
RB521S-30

SOD-523



RB521L-30

DFN1006-2



Ordering Information

Part Number	Package	Shipping	Marking Code
RB521V-30	SOD-323	3000/Tape Reel	C
RB521S-30	SOD-523	3000/Tape Reel	C
RB521L-30	DFN1006-2	10000/Tape Reel	C

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	30	V
DC Blocking Voltage	V _{DC}	30	V
Maximum Average Forward Output Current	I _{F(AV)}	200	mA
Peak Forward Surge Current, 8.3ms Single Half-sine-wave	I _{FSM}	1	A

Thermal Characteristics

Parameter	Symbol	RB521V-30	RB521S-30	RB521L-30	Unit
Power Dissipation	P _D	200	150	100	mW
Typical Thermal Resistance per leg	R _{θJA} *	500	667	1000	°C/W
Thermal resistance junction to Lead	R _{θJL}	323	658	987	°C/W
Thermal resistance junction to case	R _{θJc}	276	421	631	°C/W
Operating Junction Temperature Range	T _J	-40 ~ +125			°C
Storage Temperature Range	T _{STG}	-40 ~ +150			°C

* Part mounted on FR-4 board with recommended pad layout

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

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	V_F^*	$I_F = 10\text{mA}$	-	-	0.38	V
		$I_F = 200\text{mA}$	-	-	0.5	V
Maximum Peak Reverse Current	I_R^{**}	$V_R = 10\text{V}$	-	-	30	μA
*Pulse width $\leq 380\text{ }\mu\text{s}$, Duty cycle $< 2\%$						
**pulse test , $t_p \leq 5\text{ms}$						

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

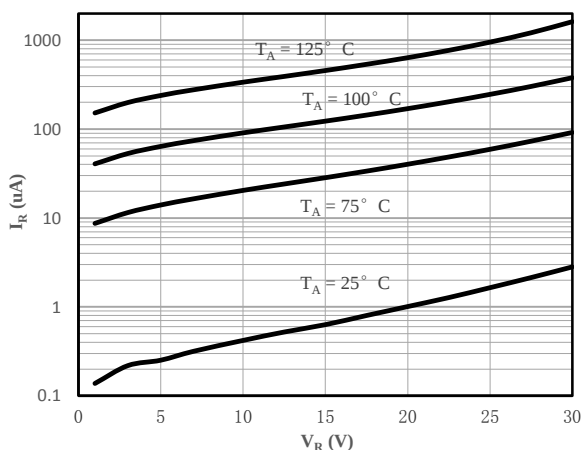


Fig 1 Typical Reverse Characteristic

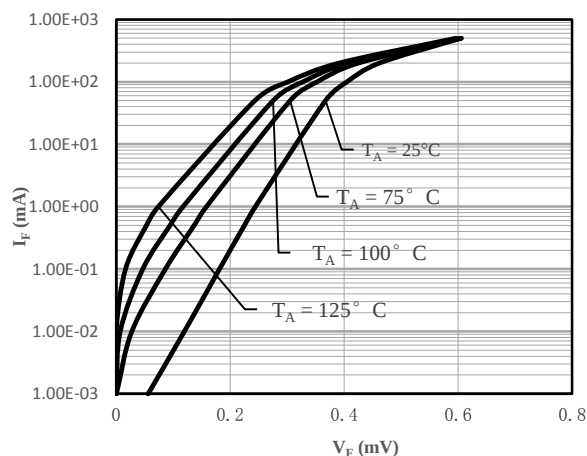


Fig 2 Typical Forward Characteristics

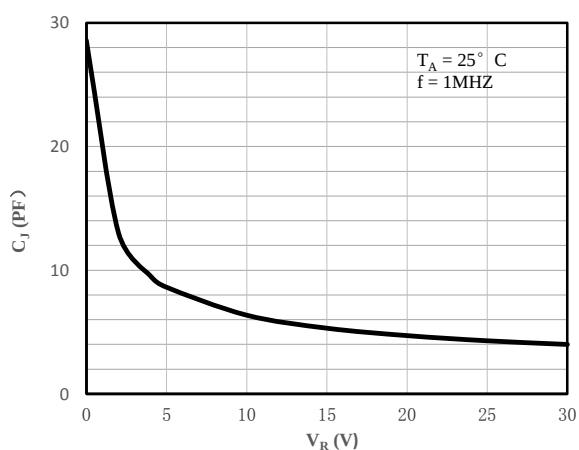


Fig 3 Capacitance Characteristics

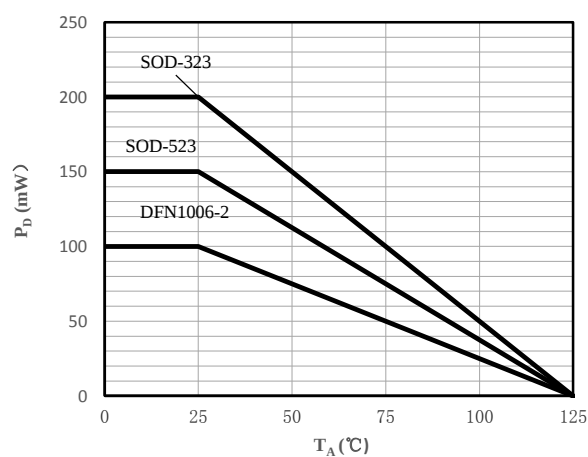


Fig 4 Derating Curve

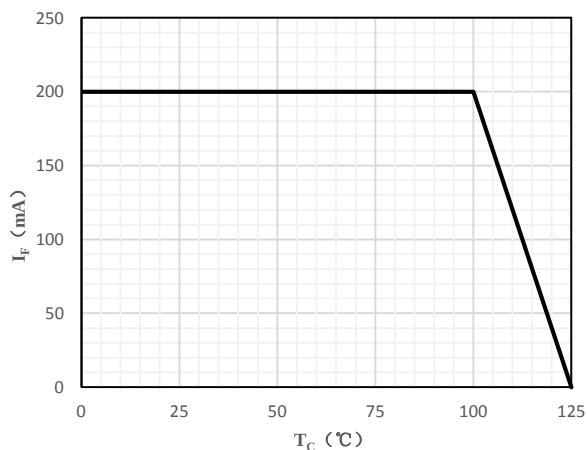
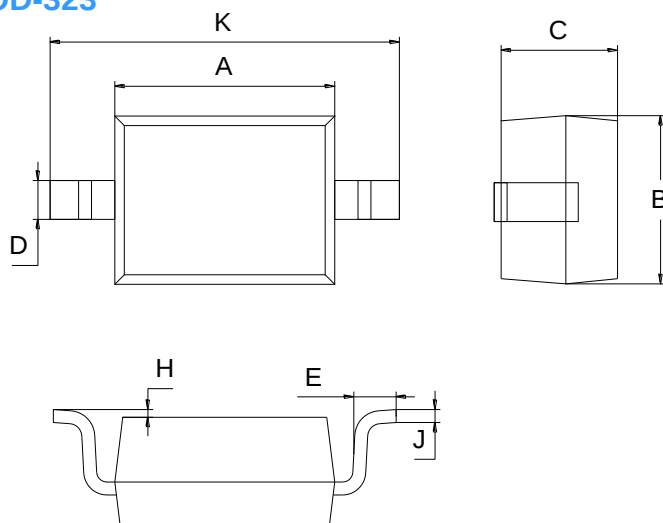


Fig 5 Current Derating Curve

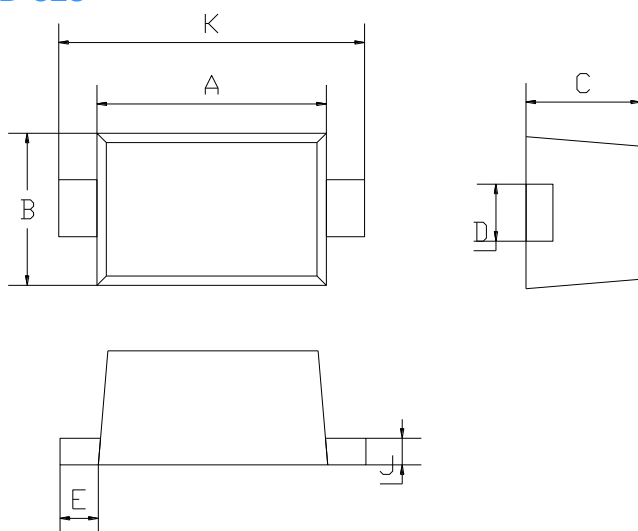
Package Outline Dimensions (unit: mm)

SOD-323



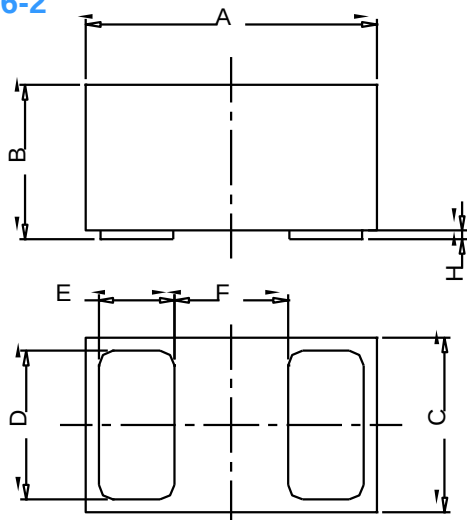
SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75

SOD-523



SOD-523		
Dim	Min	Max
A	1.10	1.30
B	0.70	0.90
C	0.50	0.70
D	0.25	0.35
E	0.15	0.25
J	0.05	0.15
K	1.50	1.70

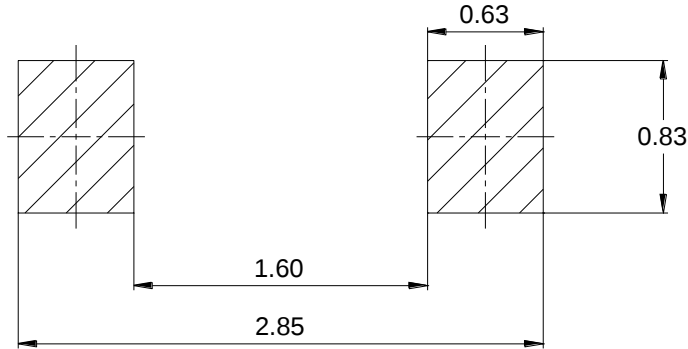
DFN1006-2



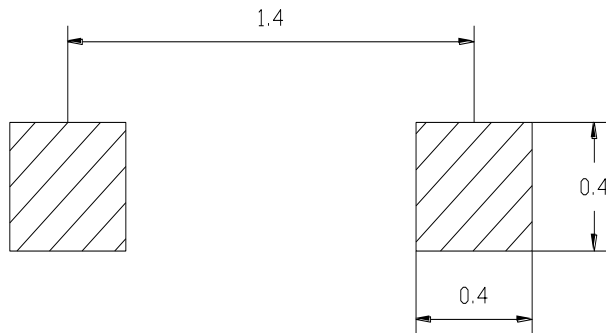
DFN1006-2			
Dim	Min	Typ	Max
A	0.95	1.00	1.075
B	0.47	0.50	0.53
C	0.55	0.60	0.675
D	0.45	0.50	0.55
E	0.20	0.25	0.30
F	-	0.40	-
H	0	0.03	0.05

Mounting Pad Layout (unit: mm)

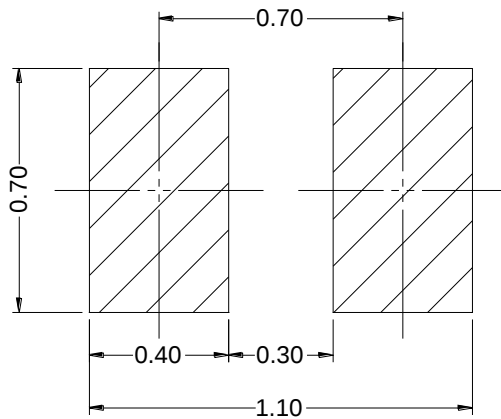
SOD-323



SOD-523



DFN1006-2



IMPORTANT NOTICE

Galaxy Microelectronics (GME) reserves the right to make changes without further notice to any product 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.