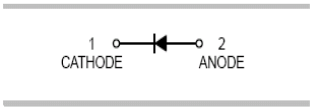
Small Signal Schottky Barrier Diode

RB500V-40

Features

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

HF





SOD-323

Typical Applications

- Low current rectification

Mechanical Data

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

Ordering Information

Part Number	Package	Shipping	Marking Code
RB500V-40	SOD-323	3000pcs / Tape & Reel	2

Maximum Ratings (@T_A=25℃ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	45	V
DC Reverse Voltage	V_R	40	V
Mean Rectifying Current	I_O	0.1	A
Peak Forward Surge Current	I_{FSM}	1	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	200	mW
Typical Thermal Resistance per leg	$R_{\Theta JA}$*	500	°C /W
Operating Junction Temperature Range	T_J	125	°C
Storage Temperature Range	T_{STG}	-40 to +150	°C
* Part mounted on FR-4 board with recommended pad layout			

Electrical Characteristics (@T_A=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	V_F*	I_F=10mA	-	-	0.45	V
Reverse Current	I_R**	V_R= 10V	-	-	1	uA
Capacitance between terminals	C_T	V_R=10V,f=1MHz	-	6	-	pF

*Pulse width ≤380 uS, Duty cycle < 2%

**pulse test ， tp≤5ms

Ratings and Characteristic Curves (T_A=25℃ unless otherwise noted)

FIG 1.TYPICAL REVERSE CHARACTERISTIC

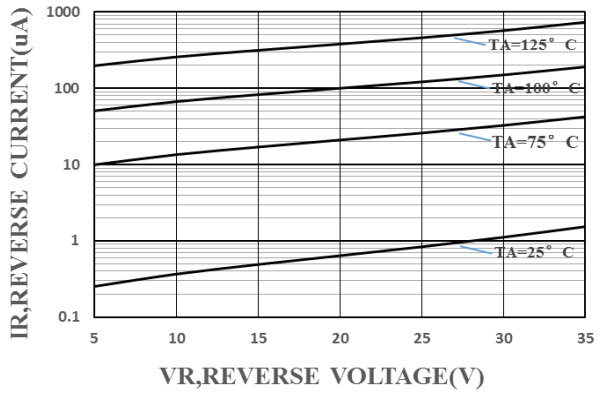


FIG 2.TYPICAL FORWARD CHARACTERISTIC

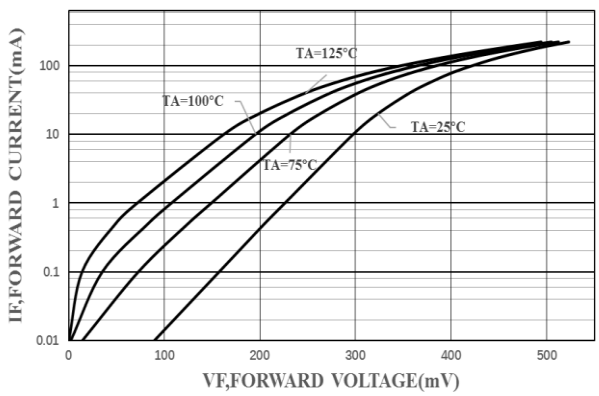


FIG 3.CAPACITANCE VS REVERSE VOLTAGE

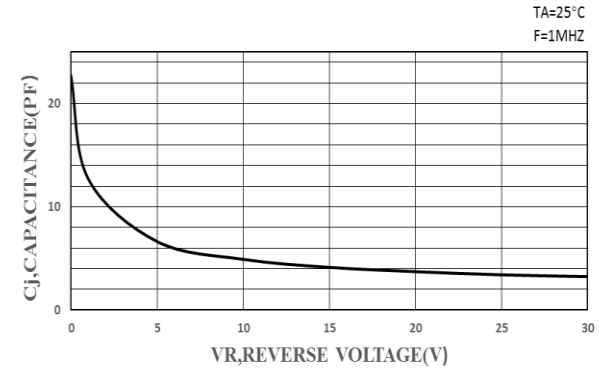
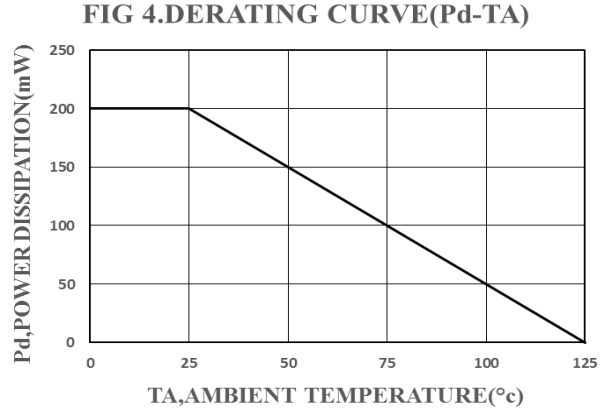
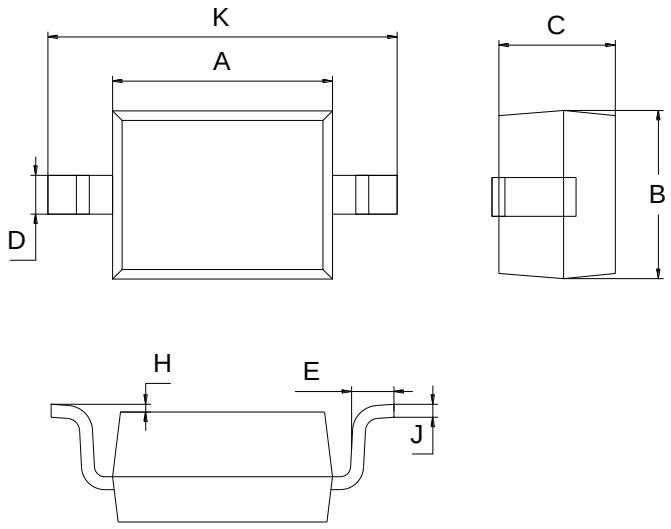


FIG 4.DERATING CURVE(Pd-TA)



Package Outline Dimensions(unit:mm)

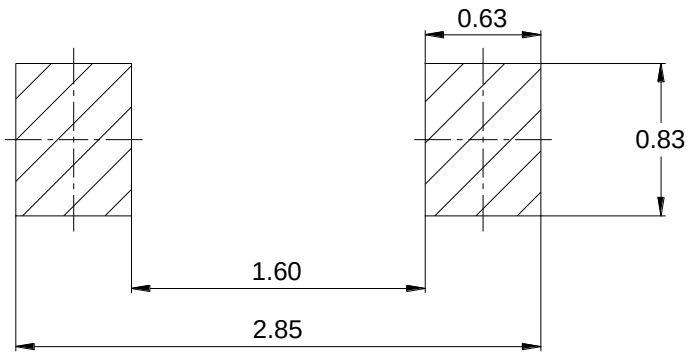
SOD-323



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

Mounting Pad Layout(unit:mm)

SOD-323



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 .