



Features

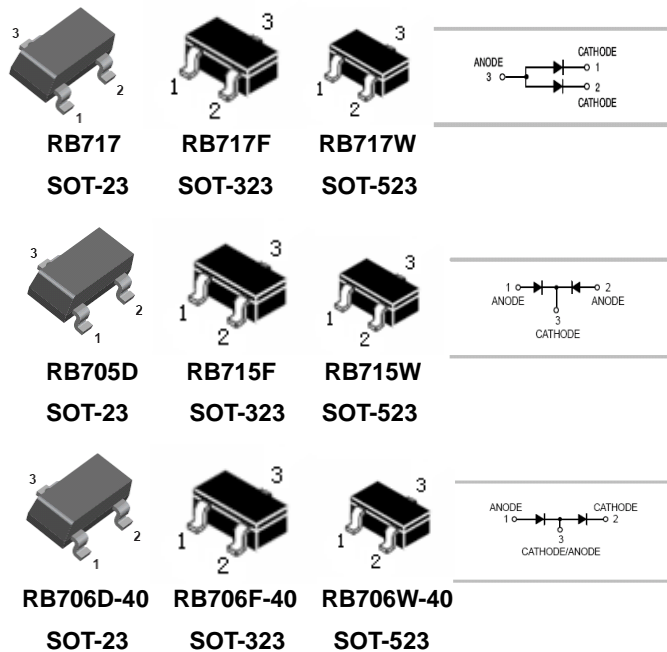
- Low reverse current and low forward voltage
- High reliability
- Small surface mounting type

Typical Applications

- Low current rectification.

Mechanical Data

- Case: SOT-323, SOT-523, SOT-23
- 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
RB717	SOT-23	3000 pcs / Tape & Reel	3C
RB705D	SOT-23	3000 pcs / Tape & Reel	D3H
RB706D-40	SOT-23	3000 pcs / Tape & Reel	D3J
RB717F	SOT-323	3000 pcs / Tape & Reel	3E
RB715F	SOT-323	3000 pcs / Tape & Reel	3D
RB706F-40	SOT-323	3000 pcs / Tape & Reel	3J
RB717W	SOT-523	3000 pcs / Tape & Reel	3E
RB715W	SOT-523	3000 pcs / Tape & Reel	3D
RB706W-40	SOT-523	3000 pcs / Tape & Reel	3J

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

Characteristic	Symbol	Value	Units
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Output Current	$I_{F(AV)}$	30	mA
Peak Forward Surge Current, 8.3ms Single Half-sine-wave	I_{FSM}	0.2	A



Thermal Characteristics

Parameter	Symbol	RB717 RB705D/ RB706D-40	RB717F/ RB715F/ RB706F-40	RB715W/ RB715W/ RB706W-40	Units
Power Dissipation	P_D	300	200	150	mW
Typical Thermal Resistance Per Leg	$R_{\theta JA}^*$	334	500	667	$^{\circ}C/W$
Operating Junction Temperature Range	T_J	-40 to +125			$^{\circ}C$
Storage Temperature Range	T_{STG}	-40 to +150			$^{\circ}C$

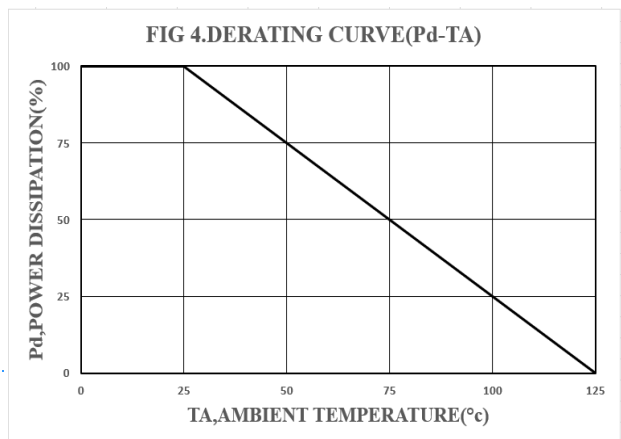
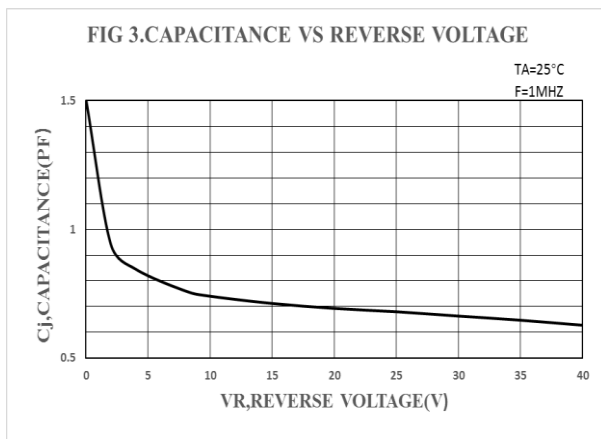
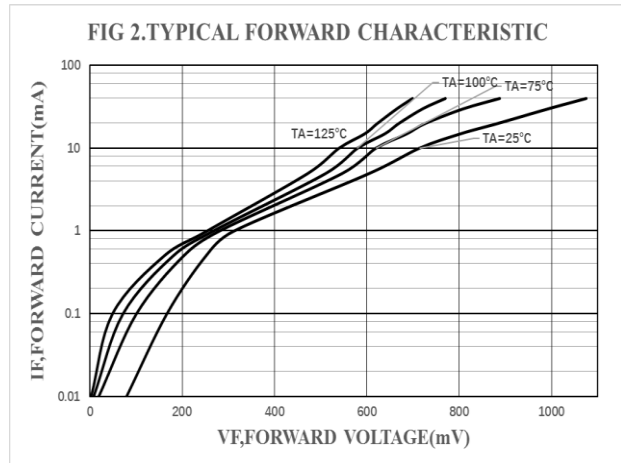
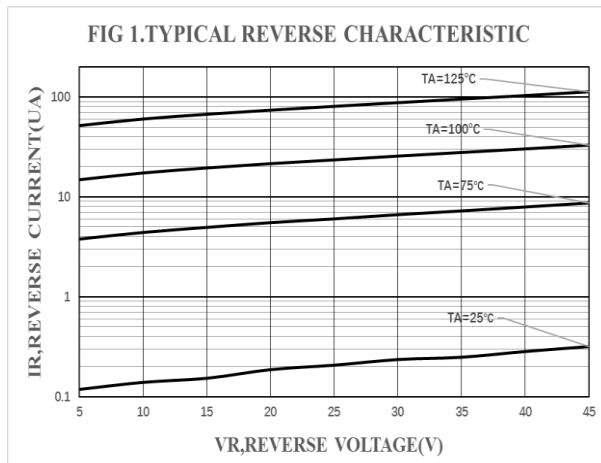
* Part mounted on FR-4 board with recommended pad layout

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

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	V_F^*	$I_F=1mA$	-	-	0.37	V
Maximum Peak Reverse Current	I_R^{**}	$V_R=30V$	-	-	0.5	μA
Capacitance Between Terminals	C_T	$V_R=1V, f=1MHz$	-	1.2	-	pF

*Pulse width $\leq 380 \mu s$, Duty cycle $< 2\%$
**pulse test, $t_p \leq 5ms$

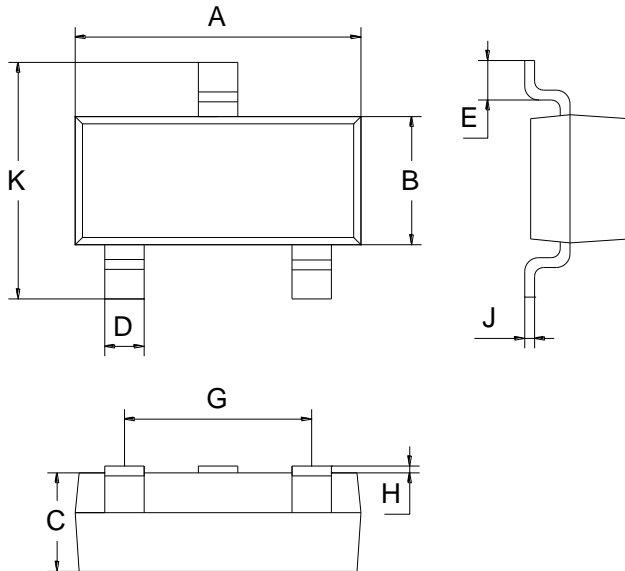
Ratings and Characteristic Curves ($T_A=25^{\circ}C$ unless otherwise noted)





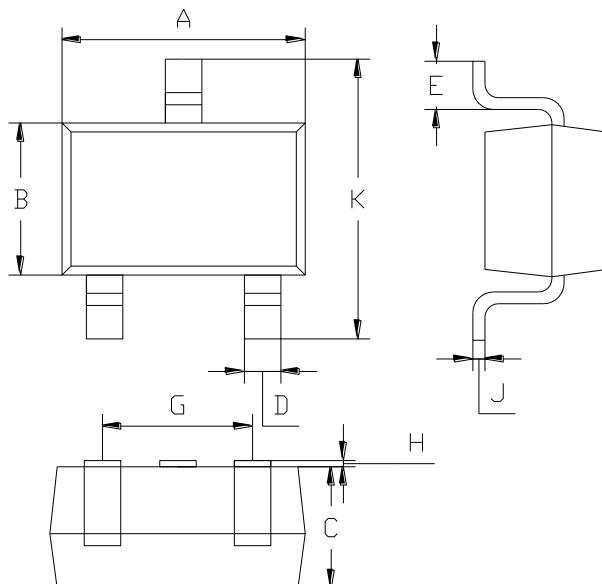
Package Outline Dimensions(unit:mm)

SOT-23



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	0.90	1.10
D	0.30	0.50
E	0.35	0.48
G	1.80	2.00
H	0.02	0.10
J	0.05	0.15
K	2.20	2.60

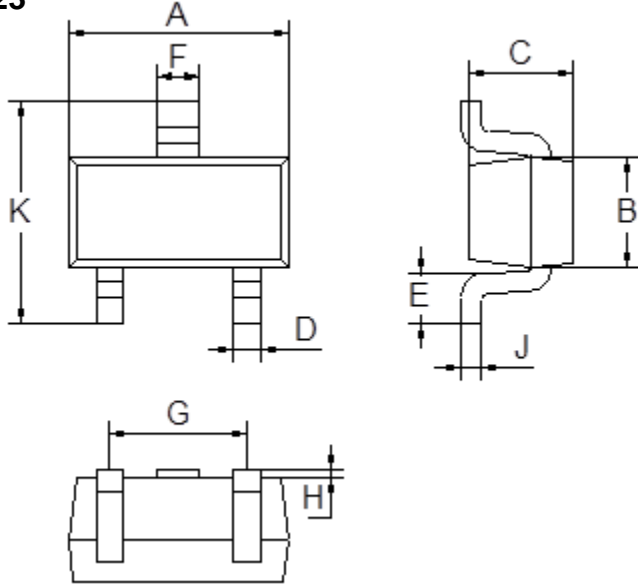
SOT-323



SOT-323		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.90	1.10
D	0.15	0.35
E	0.25	0.40
G	1.20	1.40
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40



SOT-523

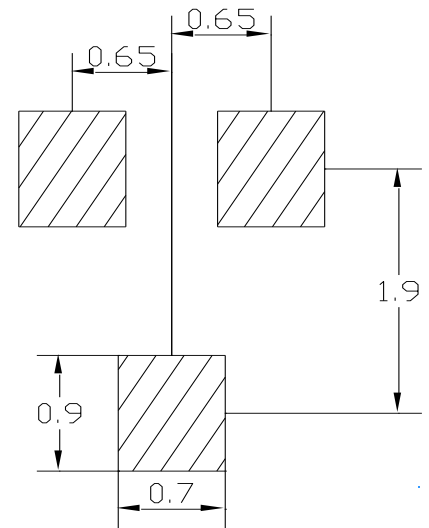
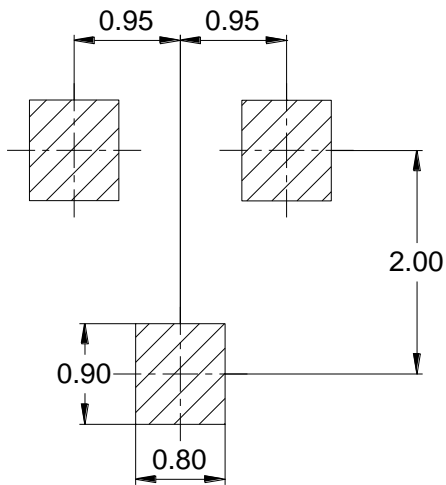


SOT-523		
Dim	Min	Max
A	1.50	1.70
B	0.75	0.85
C	0.60	0.80
D	0.15	0.30
E	0.30	0.40
F	0.25	0.40
G	0.90	1.10
H	0.02	0.10
J	0.08	0.18
K	1.45	1.75

SOT-323

Mounting Pad Layout(unit:mm)

SOT-23



SOT-523

