



### Features

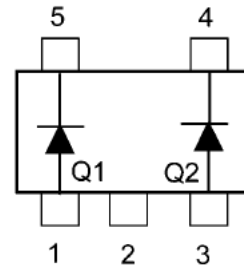
- High reliability
- Small surface mounting type

### Typical Applications

- High-Speed Switchings

### Mechanical Data

- Case: SOT-353
- 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
MBR130K	SOT-353	3000 pcs / Tape & Reel	SB1

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

Parameter	Symbol	Value	Units
Peak Repetitive Reverse Voltage	$V_{RRM}$	32	V
RMS Reverse Voltage	$V_{RMS}$	30	V
Maximum Average Forward Output Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current, 8.3ms Single Half-sine-wave	$I_{FSM}$	5	A

### Thermal Characteristics

Parameter	Symbol	Value	Units
Operating Junction Temperature Range	$T_J$	-55 to +150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^{\circ}\text{C}$
* Part mounted on FR-4 board with recommended pad layout			

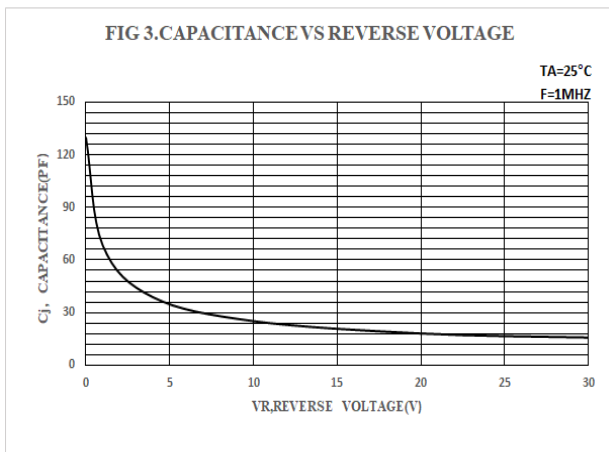
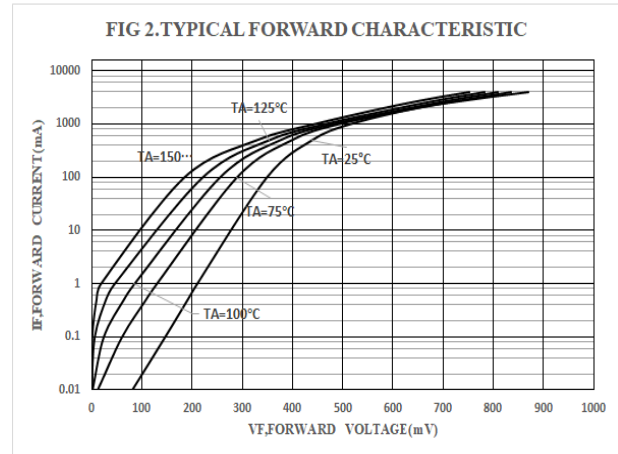
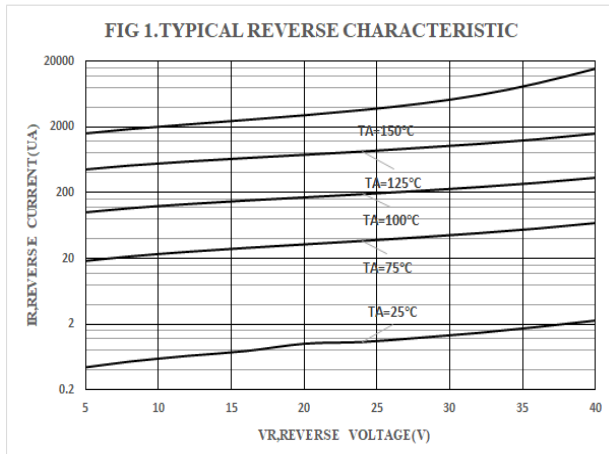


### Electrical Characteristics (@ $T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	$V_F^*$	$I_F=10\text{mA}$	-	0.23	-	V
		$I_F=100\text{mA}$	-	0.35	-	
		$I_F=1\text{A}$	-	0.51	0.57	
Maximum Peak Reverse Current	$I_R^{**}$	$V_R=30\text{V}$	-	-	50	$\mu\text{A}$
Capacitance Between Terminals	$C_T$	$V_R=0\text{V}, f=1\text{MHz}$	-	129	-	pF

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

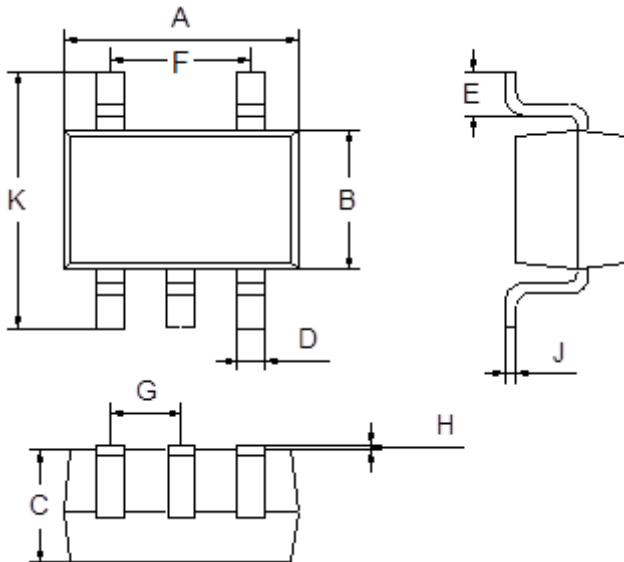
### Ratings and Characteristic Curves ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)





## Package Outline Dimensions(unit:mm)

### SOT-353



SOT-353		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.85	1.05
D	0.15	0.35
E	0.25	0.40
F	1.20	1.40
G	0.60	0.70
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40

## Mounting Pad Layout(unit:mm)

### SOT-353

