

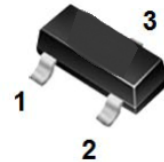
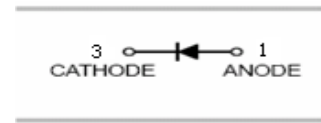


Features

- Ultra high switching speed
- Low forward voltage
- Guard ring protected

Mechanical Data

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



SOT-23

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
BAT730	SOT-23	3000 pcs / Tape & Reel	730

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

Parameter	Symbol	Value	Unit
DC Reverse Voltage	V _R	50	V
Maximum Average Forward Output Current	I _{F(AV)}	500	mA
Peak Forward Surge Current (8.3ms single half sine-wave)	I _{FSM}	20	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P _D	350	mW
Operating junction Temperature	T _J	-55 ~ +125	°C
Storage Temperature Range	T _{STG}	-55 ~ +125	°C

Electrical Characteristics (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V _(BR)	I _R = 200μA	50	-	-	V
Forward Voltage	V _F	I _F = 500mA	-	-	0.55	V
Maximum Peak Reverse Current	I _R	V _R = 45V	-	-	50	μA
Capacitance Between Terminals	C _J	V _R = 10V, f = 1MHz	-	25	-	pF



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

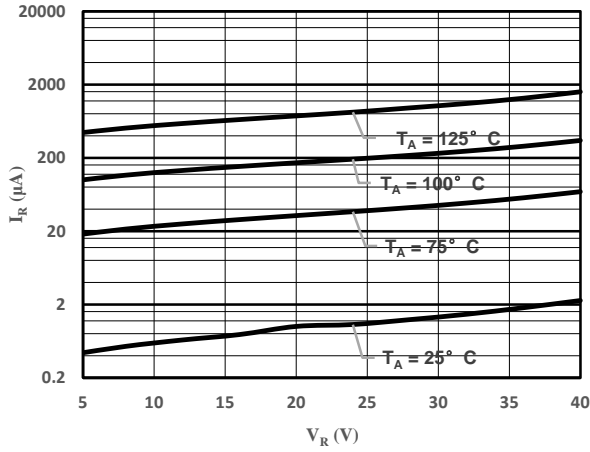


Fig. 1 Typical Reverse Characteristic

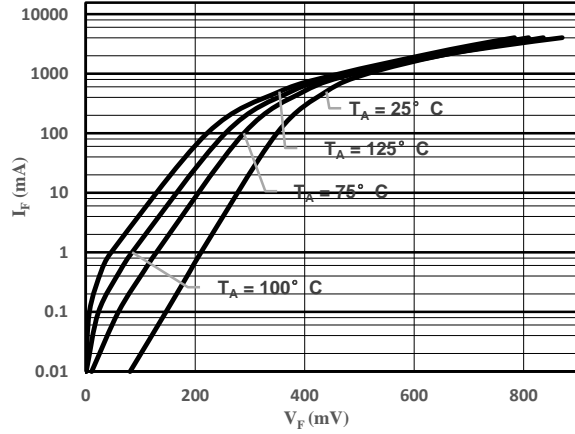


Fig. 2 Typical Forward Characteristics

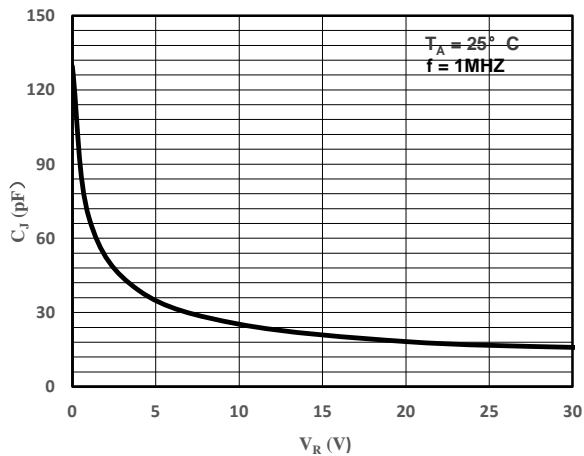


Fig. 3 Capacitance Characteristics

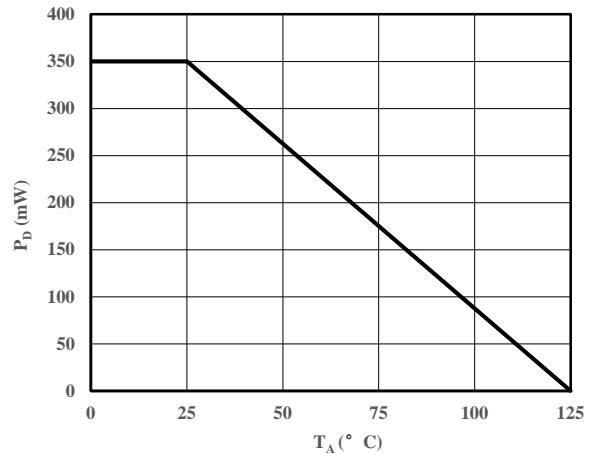
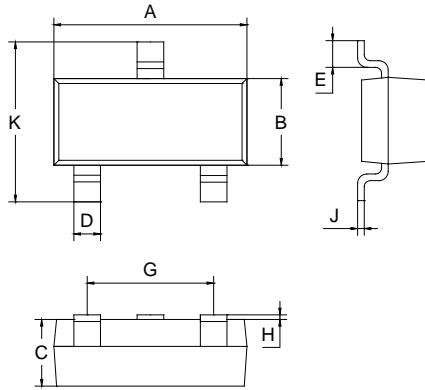


Fig. 4 Derating Curve



Package Outline Dimensions (Unit: mm)



SOT-23		
Dimension	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

Package Outline Dimensions (Unit: mm)

SOT-23

