



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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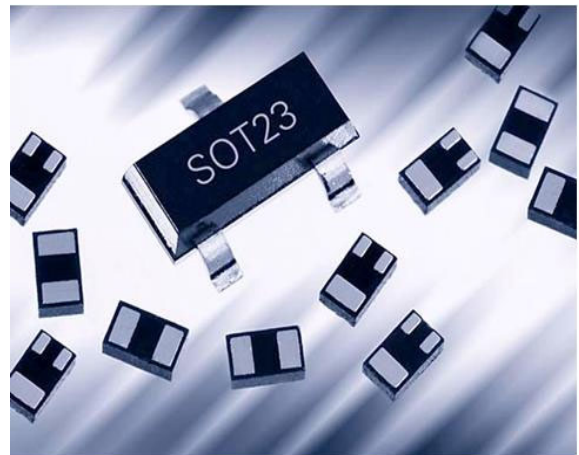
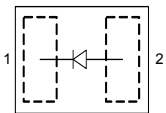
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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Silicon Schottky Diode

- RF Schottky diode for mixer applications up to 26 GHz
- Extremely low inductance combined with ultra low device capacitance
- Very stable performance for all major parameters
- Package size: 0.62 x 0.31 x 0.31 mm³ only
- Pb-free (RoHS compliant) package


BAT24-02LS


Type	Package	Configuration	L_S (nH)	Marking
BAT24-02LS	TSSLP-2-1	single, leadless	0.2 ±0.05	S

Maximum Ratings at $T_A = 25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	4	V
Forward current	I_F	110	mA
Total power dissipation $T_S \leq 73^\circ\text{C}$	P_{tot}	100	mW
Junction temperature	T_j	150	°C
Operating temperature range	T_{op}	-55 ... 150	
Storage temperature	T_{stg}	-55 ... 150	

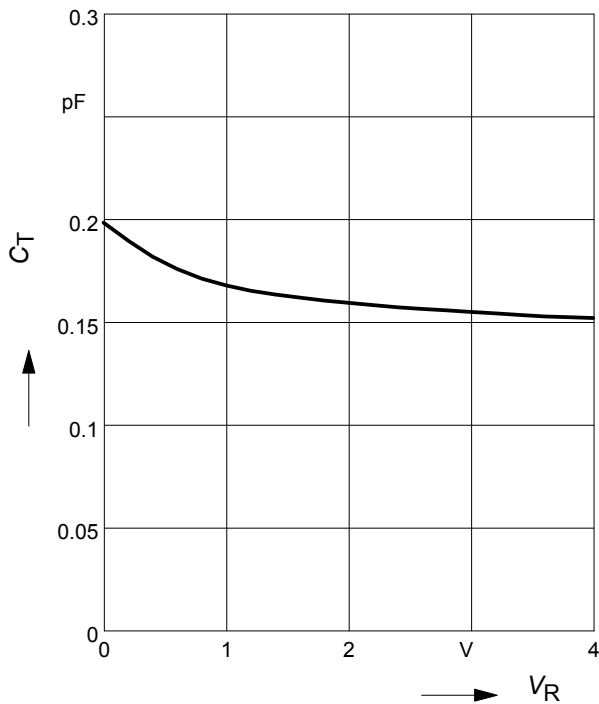
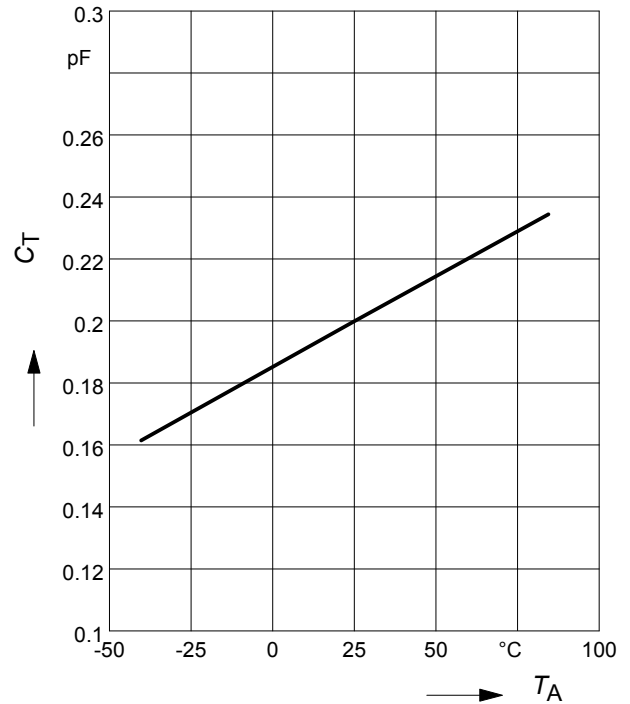
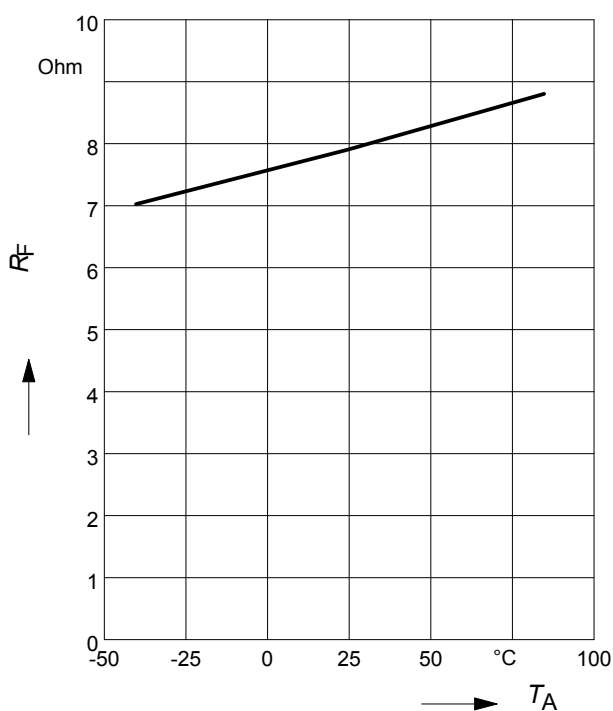
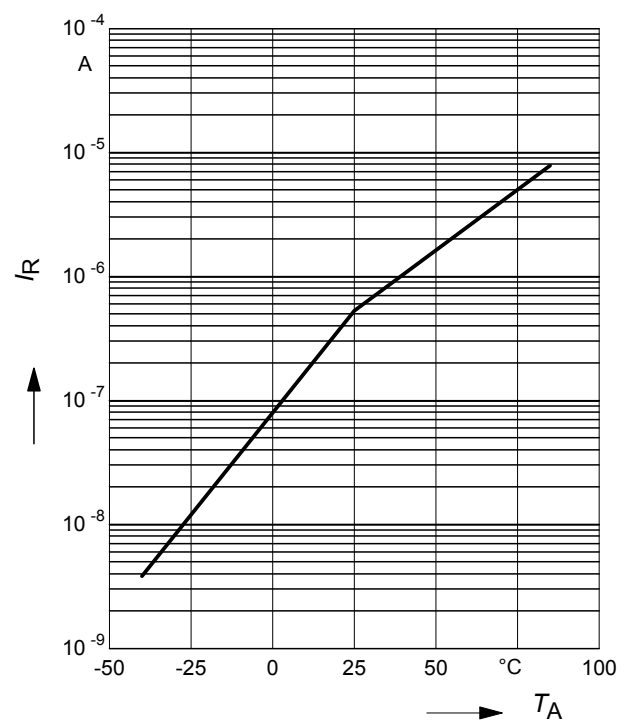
Thermal Resistance

Parameter	Symbol	Value	Unit
Junction - soldering point ¹⁾	R_{thJS}	≤ 770	K/W

¹⁾For calculation of R_{thJA} please refer to Application Note Thermal Resistance

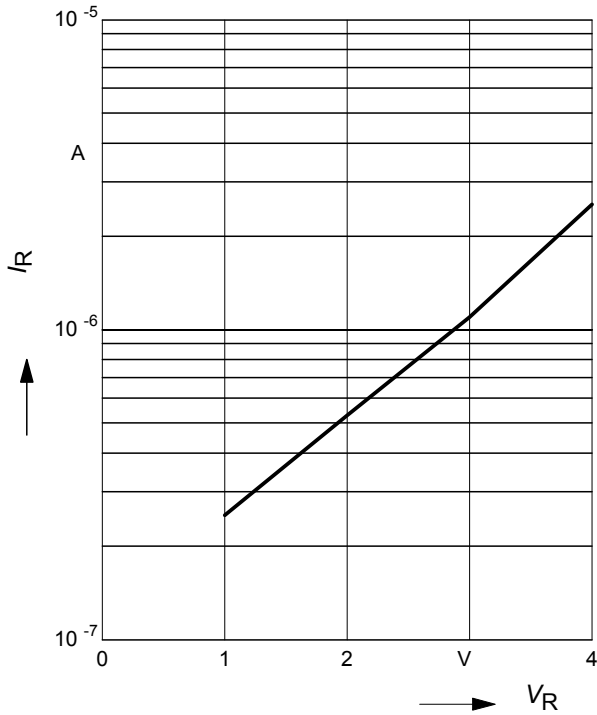
Electrical Characteristics at $T_A = 25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC Characteristics					
Breakdown voltage $I_{(BR)} = 10 \mu\text{A}$	$V_{(BR)}$	4	-	-	V
Reverse current $V_R = 1 \text{ V}$	I_R	-	-	5	μA
Forward voltage $I_F = 1 \text{ mA}$ $I_F = 10 \text{ mA}$	V_F	0.16 0.25	0.23 0.32	0.32 0.41	V
AC Characteristics					
Diode capacitance $V_R = 0 \text{ V}, f = 1 \text{ MHz}$	C_T	-	0.2	0.23	pF
Differential forward resistance $I_F = 10 \text{ mA} / 50 \text{ mA}$	R_F	-	8	10	Ω

Diode capacitance $C_T = f(V_R)$
 $f = 1\text{MHz}, T_A = 25\text{ }^\circ\text{C}$

Diode capacitance $C_T = f(T_A)$
 $V_R = 0\text{ V}, f = 1\text{MHz}$

Differential forward resistance $R_F = f(T_A)$
 $I_F = 10\text{ mA} / 50\text{ mA}$

Reverse current $I_R = f(T_A)$
 $V_R = 1\text{ V}$


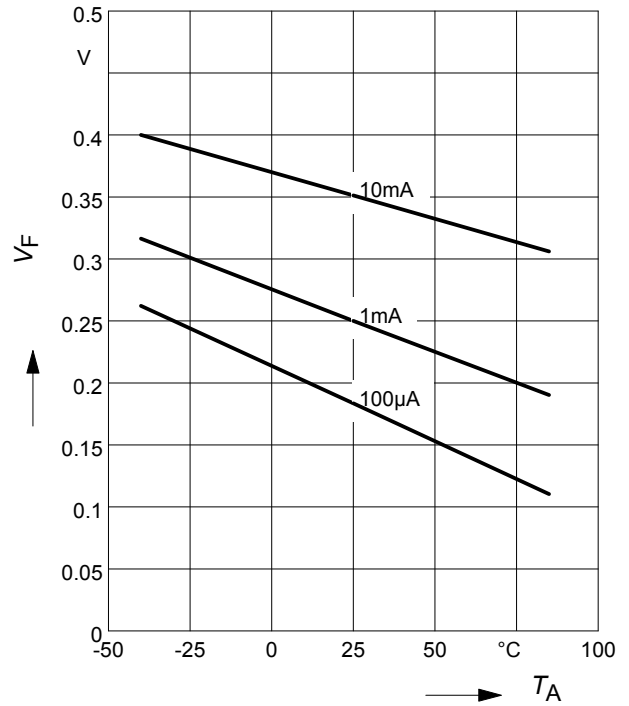
Reverse current $I_R = f(V_R)$

$T_A = 25\text{ }^\circ\text{C}$



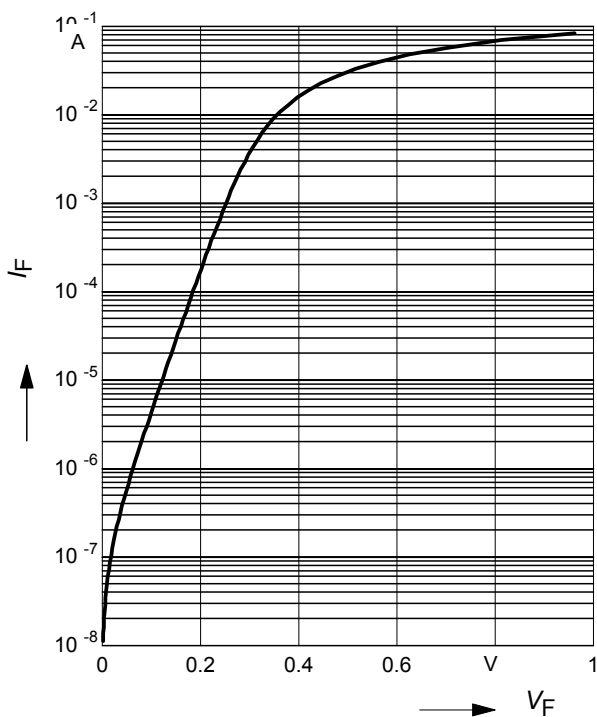
Forward Voltage $V_F = f(T_A)$

$I_F = \text{Parameter}$

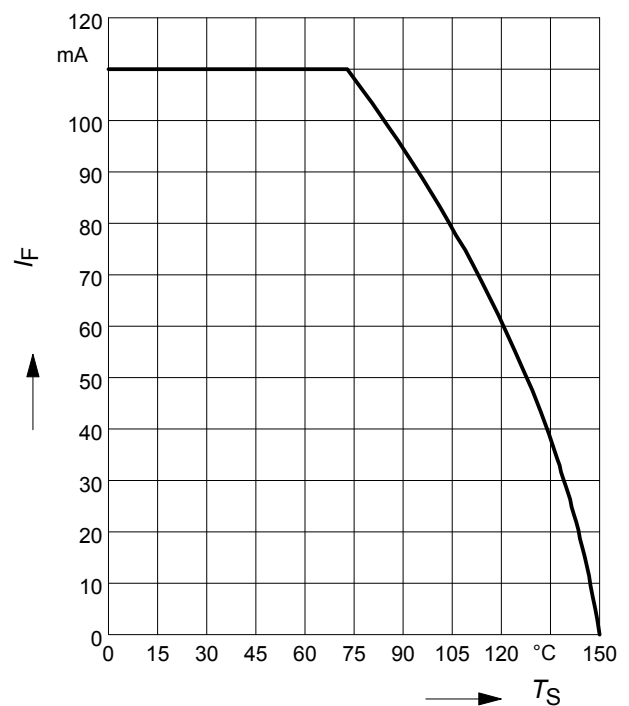


Forward current $I_F = f(V_F)$

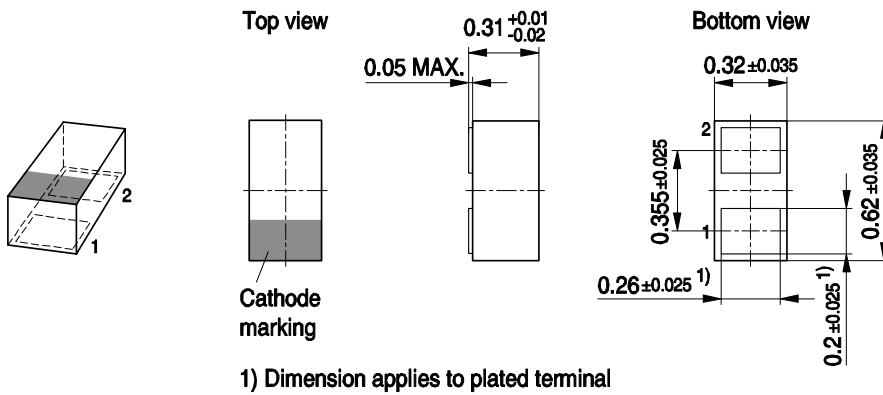
$T_A = 25\text{ }^\circ\text{C}$



Forward current $I_F = f(T_S)$

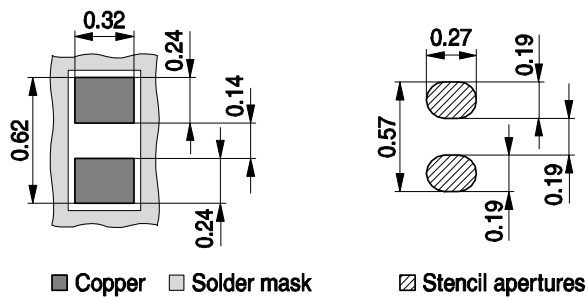


Package Outline

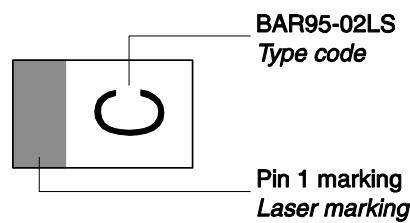


Foot Print

For board assembly information please refer to Infineon website "Packages"

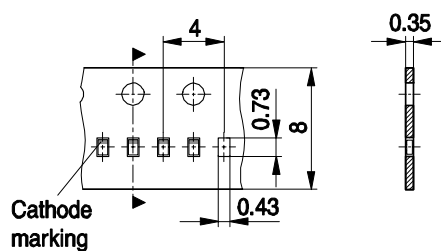


Marking Layout (Example)



Standard Packing

Reel ø180 mm = 15.000 Pieces/Reel



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