BAT165WS

SCHOTTKY BARRIER DIODE

Features

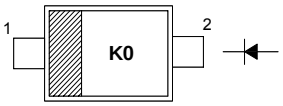
• Medium current schottky rectifier diode

Applications

• For low-loss, fast-recovery, meter protection, bias isolation and clamping applications

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "**K0**"
Simplified outline SOD-323 and symbol

Absolute Maximum Ratings (T_a = 25 °C)

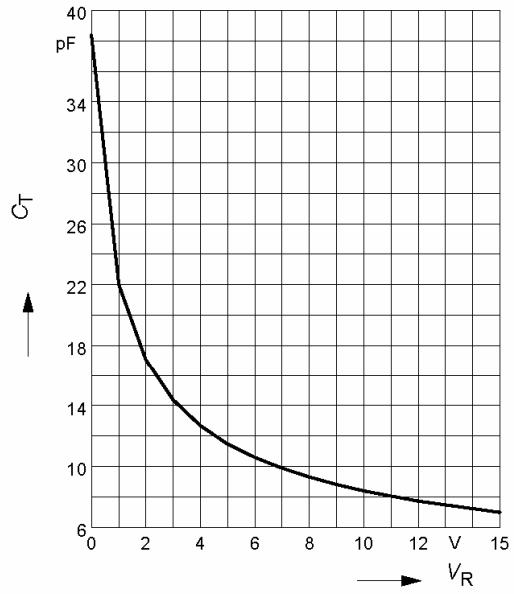
Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	40	V
Average forward current	I_{FAV}	500	mA
Forward Current	I_F	750	mA
Surge Forward Current (t ≤ 10 ms)	I_{FSM}	2.5	A
Total Power Dissipation	P_{tot}	600	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_s	- 65 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Max.	Unit
Forward Voltage at I_F = 10 mA at I_F = 250 mA	V_F	 0.4 0.7	V
Reverse Current at V_R = 30 V at V_R = 30 V, T_a = 65 °C	I_R	 50 900	µA
Diode Capacitance at V_R = 10 V, f = 1 MHz	C_T	12	pF

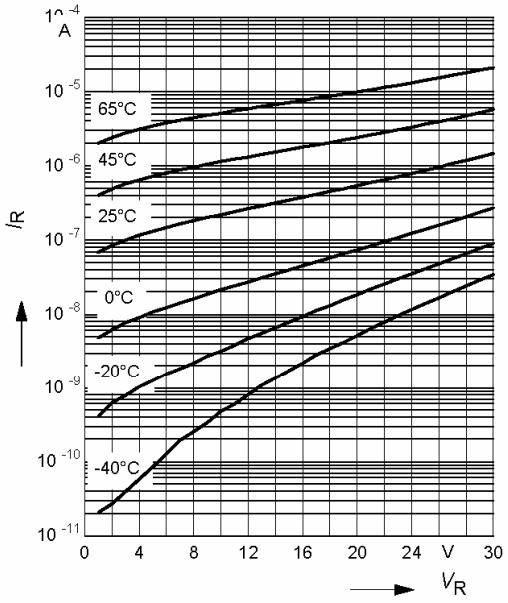
Diode capacitance $C_T = f(V_R)$

f = 1MHz



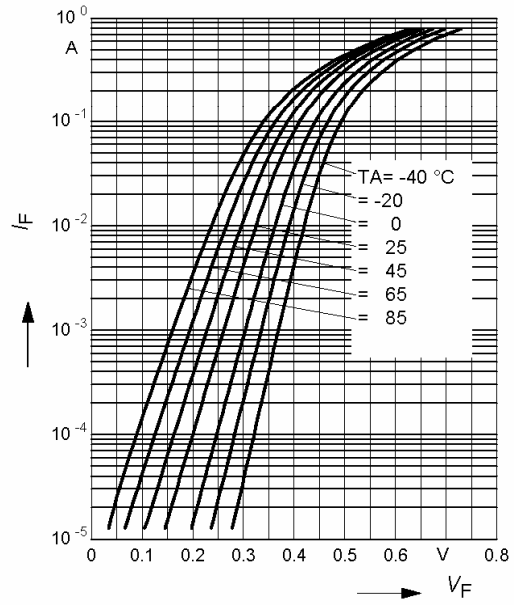
Reverse current $I_R = f(V_R)$

T_A = Parameter

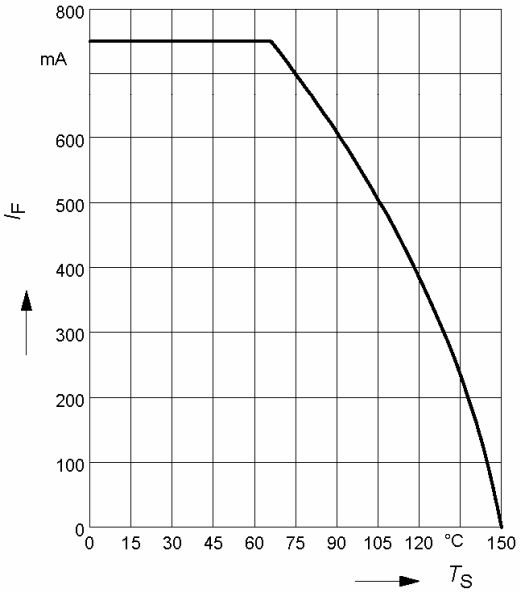


Forward current $I_F = f(V_F)$

T_A = Parameter

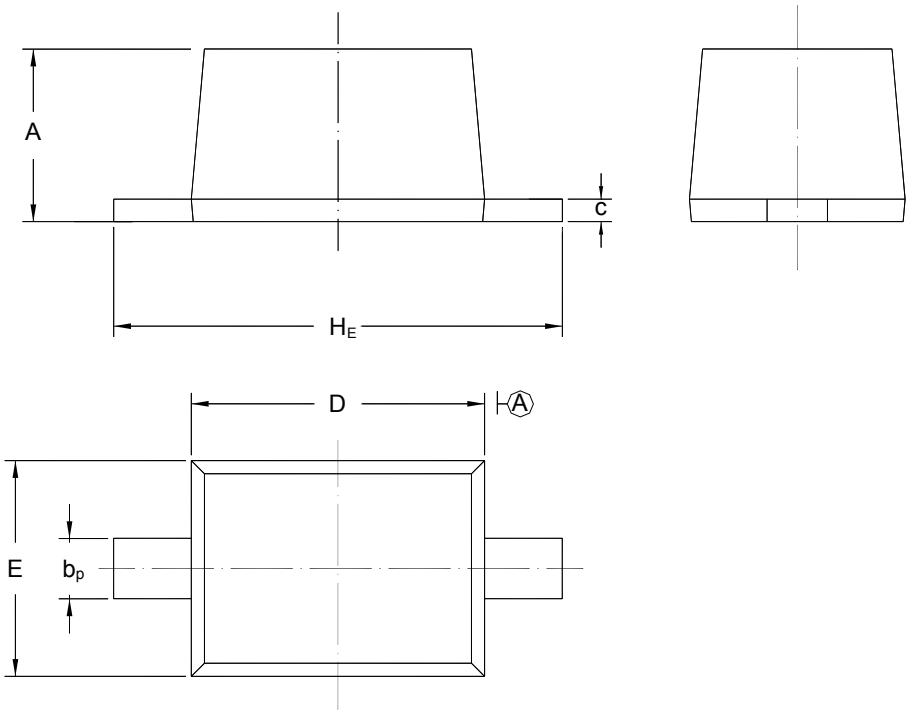


Forward current $I_F = f(T_S)$



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-323**



UNIT	A	b_p	C	D	E	H_E
mm	1.10 0.80	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30