

BAT165WS

SCHOTTKY BARRIER DIODE

Features

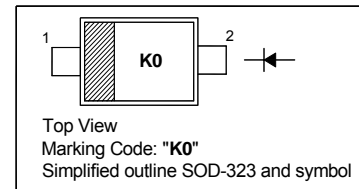
- Medium current schottky rectifier diode

Applications

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

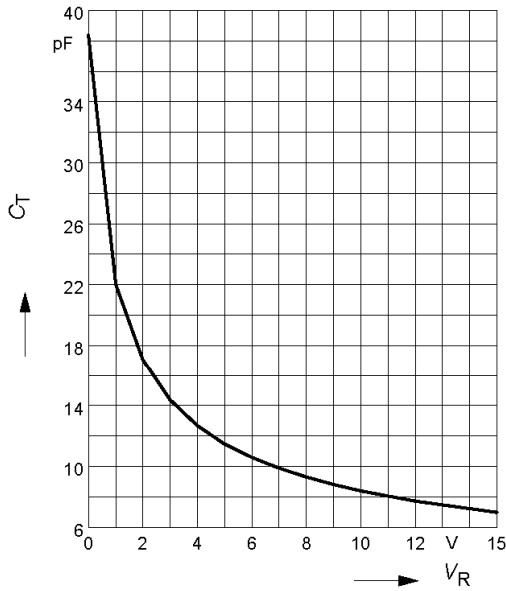
Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	40	V
Average forward current	I_{FAV}	500	mA
Forward Current	I_F	750	mA
Surge Forward Current ($t \leq 10\text{ ms}$)	I_{FSM}	2.5	A
Total Power Dissipation	P_{tot}	600	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65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

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

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

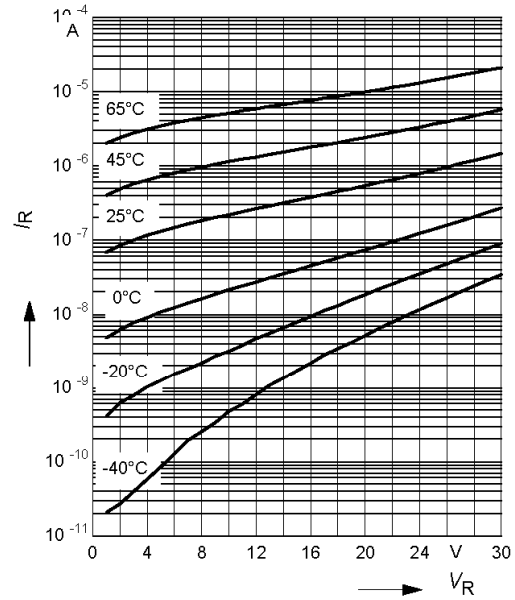
Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$



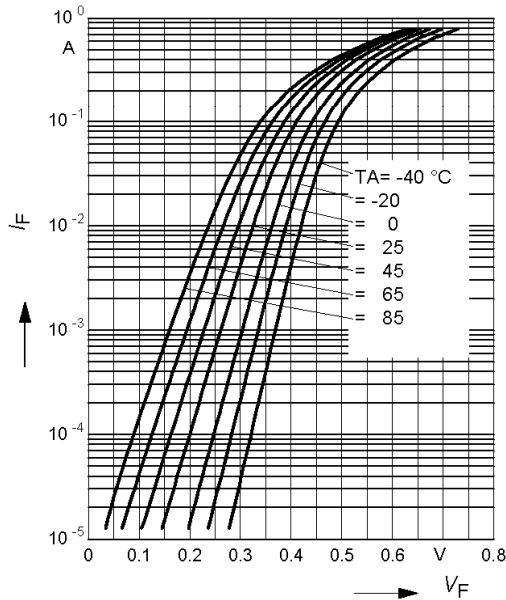
Reverse current $I_R = f(V_R)$

$T_A = \text{Parameter}$

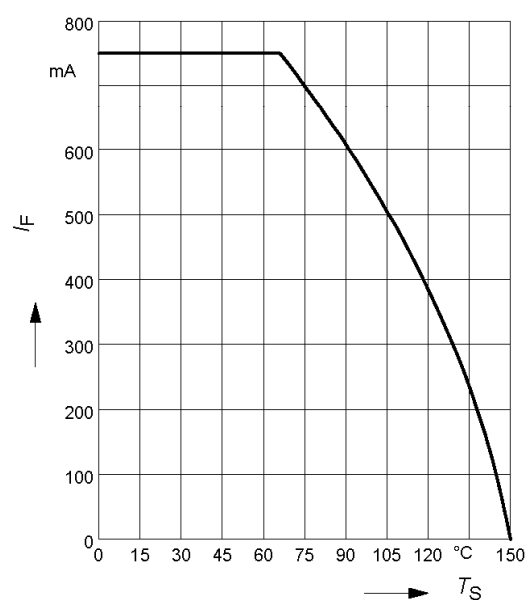


Forward current $I_F = f(V_F)$

$T_A = \text{Parameter}$



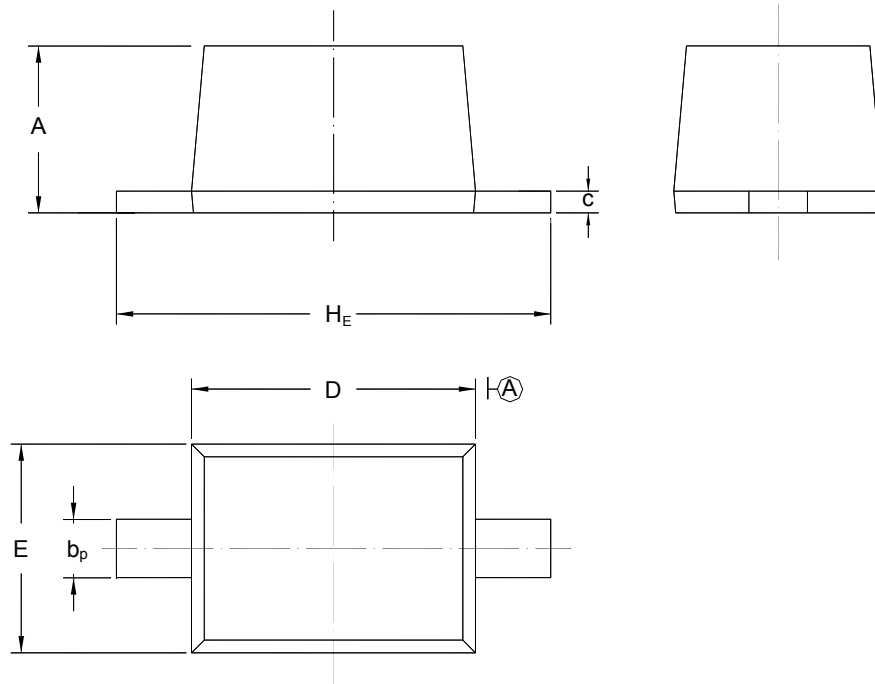
Forward current $I_F = f(T_S)$



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 0.10	1.80 1.60	1.35 1.15	2.80 2.30