

Surface Mount Schottky Barrier Diode

 Lead(Pb)-Free

Features:

- * LOW Turn-on Voltage
- * Fast Switching
- * PN Junction Guard for Transient and ESD Protection
- * Designed for Surface Mount Application

Mechanical Data:

- * Case: SOD-323,
- * Plastic Material –UL Recognition Flammability Classification 94V-0
- * Leads: Solderable per MIL-STD-202, Method 208
- * Polarity: Cathode Band
- * Weight: 0.004 grams(approx.)

SCHOTTKY DIODE

70 mAMPERES

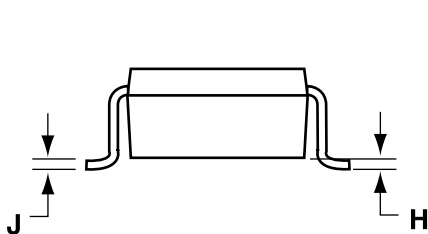
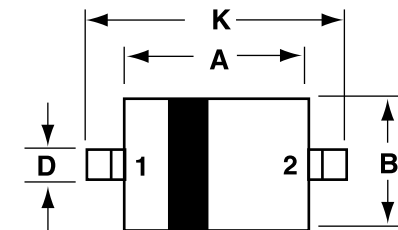
70 VOLTS



SOD-323

SOD-323 Outline Demensions

Unit:mm



Dim	MILLMETERS	
	Min	Max
A	1.60	1.80
B	1.15	1.35
C	0.80	1.00
D	0.25	0.40
E	0.15 REF	
H	0.00	0.10
J	0.089	0.377
K	2.30	2.70

PIN 1.CATHODE
2.ANODE


Maximum Ratings (T_A=25°C Unless otherwise noted)

Characteristic	Symbol	Value	Unit
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	70	V
Forward Continuous Current	I _F	70	mA
Peak forward surge current @<1.0s	I _{FSM}	100	mA
Power Dissipation	P _D	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	625	K/W
Junction temperature Range	T _J	150	°C
Storage temperature Range	T _{STG}	-55 to +150	°C

Electrical Characteristics (T_A=25°C Unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
Forward Voltage I _F =1.0mA I _F =15mA	V _F	-	-	0.41 1.0	V
Reverse Current V _R =50V	I _R	-	-	100	nA
Total Capacitance V _R =0V, f=1.0MHz	C _T	-	-	2	pF
Reverse Recovery Time I _F =I _R =10mA, I _{rr} =0.1 x I _R , R _L =100Ω	t _{rr}	-	-	5	ns

Device Marking

Item	Marking	Equivalent Circuit diagram
BAS70WS	K73	

Electrical Characteristic curves(Ta=25°C)

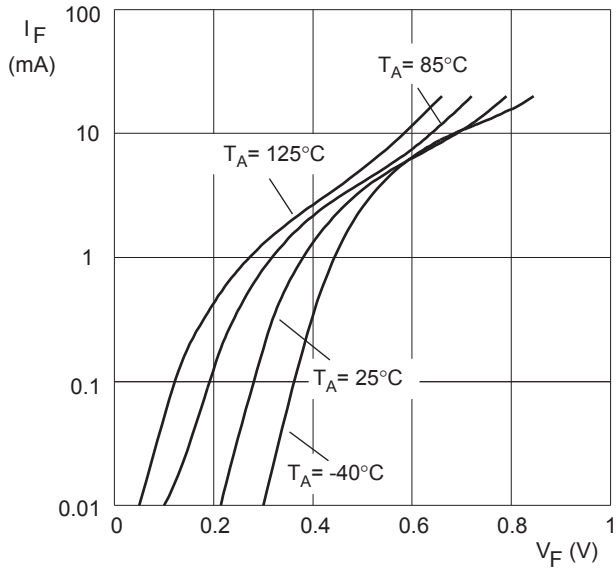


Fig.1 Forward current as a function of forward voltage; typical values.

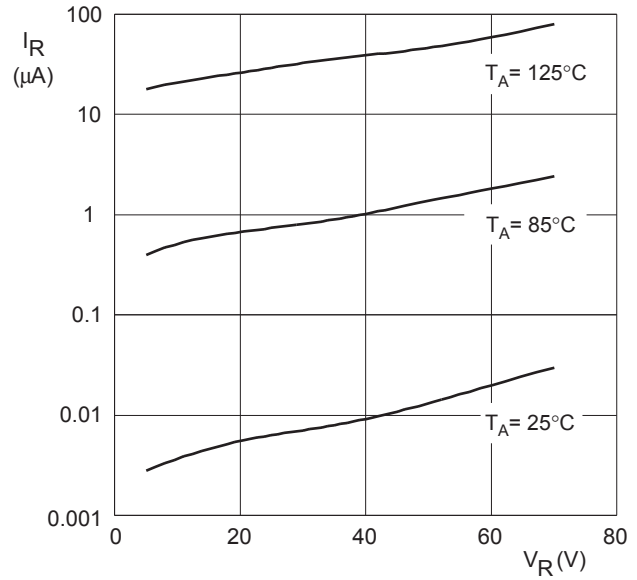


Fig.2 Reverse current as a function of reverse voltage; typical values.

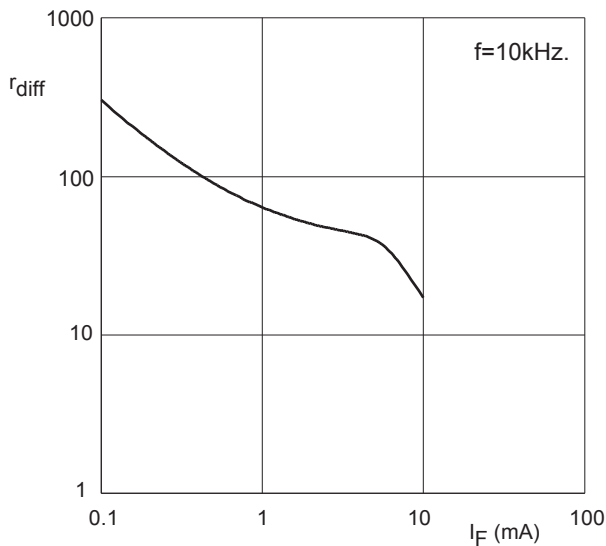


Fig.3 Differential forward resistance as a function of forward current.

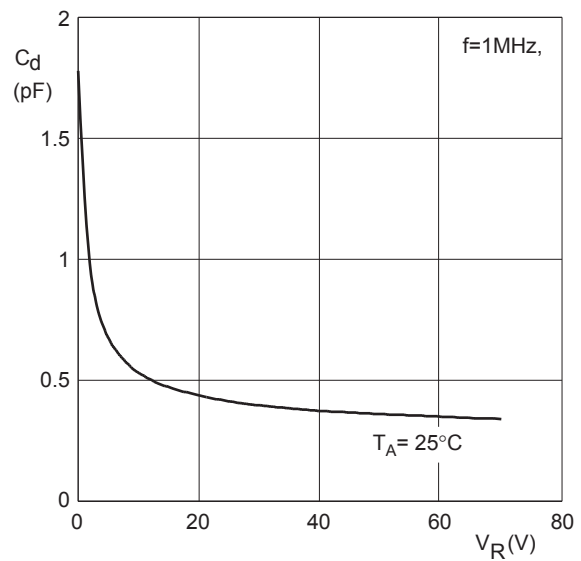


Fig.4 Diode capacitance as a function of reverse voltage.