RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

BAS70WS

SCHOTTKY DIODES

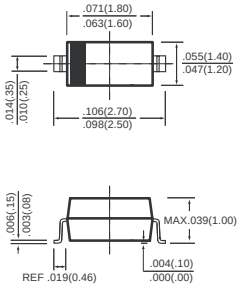
FEATURES

* Fast Switching Speed
* Low turn-on voltage
* PN Junction Guard for Transient and ESD Protection
* Designed for Surface Mount Application
* Plastic Material-UL Recognition Flammability Classification 94V-O

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-O rate flame retardant
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any
* Weight: 0.004 grams

SOD-323



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

MAXIMUM RATINGS (@T_A=25°C unless otherwise noted)

RATINGS	SYMBOL	BAS70WS	UNITS
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RMR} V_{RWR} V_R	70	Volts
Maximum Forward Comtinuous Current	I_F	70	mAmps
Non-Repetitive Peak Forward Surge Current @t<1.0S	I_{FSM}	100	mAmps
Maximum Power Dissipation	P_D	200	mW
Thermal Resistance junction to ambient	$R_{\theta JA}$	625	K/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to + 150	°C

ELECTRICAL CHARACTERISTICS (@ T_A = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse voltage leakage current	(V_R=50V)	I_R	-	-	100	nA
Forward voltage	(I_F=1mA) (I_F=15mA)	V_F	 -	- -	0.41 1	V
Capacitance between terminals	(V_R=0V,f=1MHz)	C_T	-	-	2	pF
Reverse Recovery Time	(I_F=I_R=10mA,R_L=100Ω,I_{rr}=0.1xI_R)	t_{rr}	-	-	5	ns

2006-3

RATING AND CHARACTERISTICS CURVES (BAS70WS)

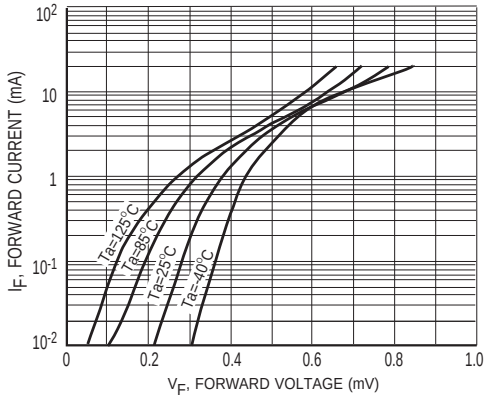


Figure1 Forward current as a function of forward voltage; typical values

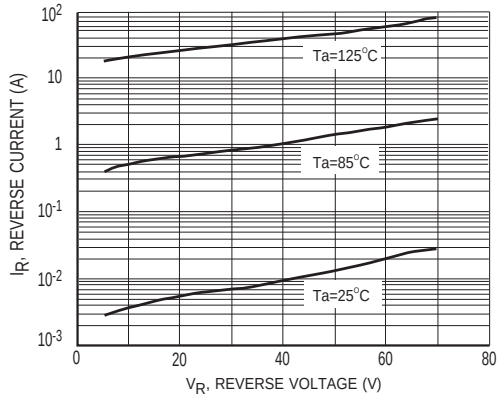


Figure2 Reverse current as a function of reverse voltage; typical values

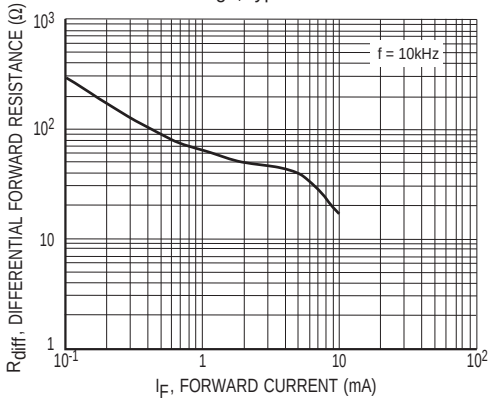


Figure3 Differential forward resistance as a function of forward current;typical values

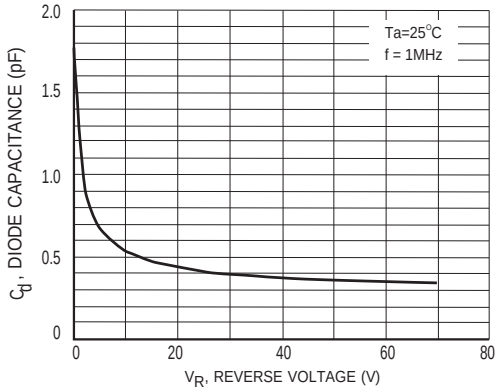


Figure4 Diode capacitance as a function of reverse voltage;typical values

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