

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

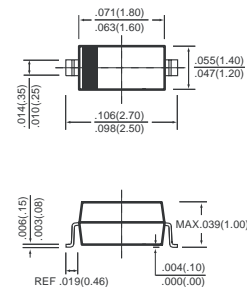
- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.004 grams

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%.



SOD-323



MAXIMUM RATINGS (@ $T_A=25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	BAS70WS	UNITS
Peak Repetitive Peak reverse voltage	V_{RMR}	70	Volts
Working Peak Reverse Voltage	V_{RWR}		
DC Blocking Voltage	V_R		
Maximum Forward Continuous Current	I_F	70	mAmps
Non-Repetitive Peak Forward Surge Current @ $t < 1.0\text{S}$	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 (@ $T_A = 25^\circ\text{C}$ unless otherwise noted)

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

RATING AND CHARACTERISTICS CURVES (BAS70WS)

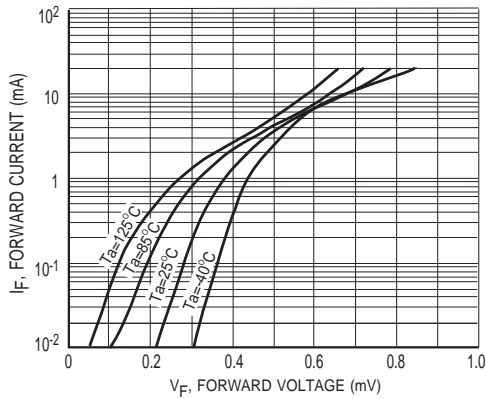


Figure1 Forward current as a function of forward voltage; typical values

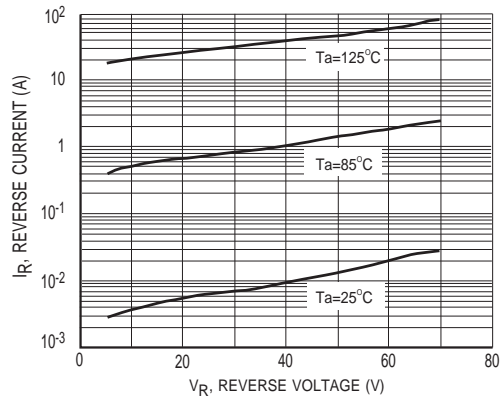


Figure2 Reverse current as a function of reverse voltage; typical values

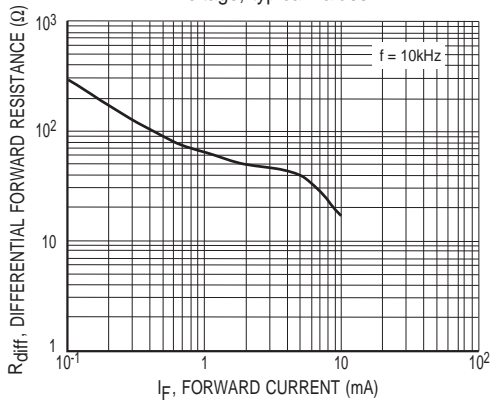


Figure3 Differential forward resistance as a function of forward current; typical values

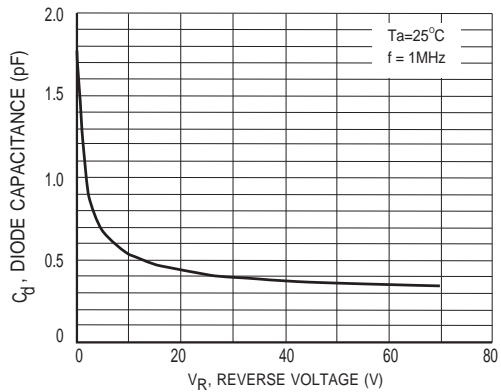


Figure4 Diode capacitance as a function of reverse voltage; typical values

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