

Advanced Schottky Barrier Diodes

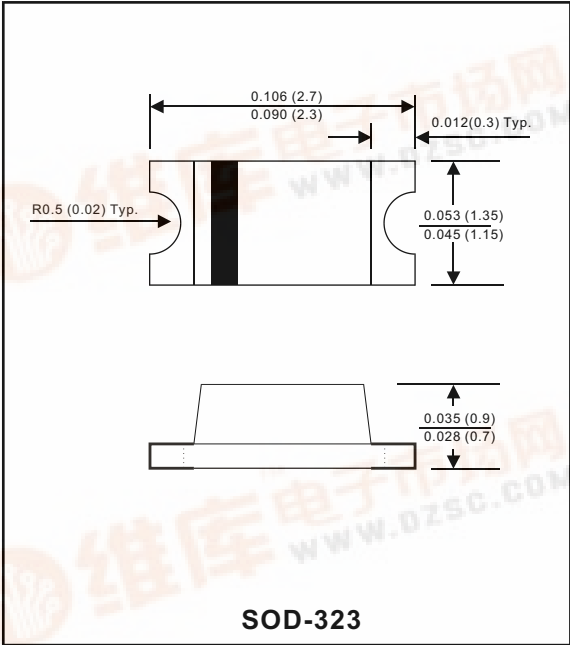
Formosa MS

ASD501V-N

Surface mount small signal type

Features

- Extermely low VF
- Extermely thin package
- Low stored charge
- Majority carrier conduction



Mechanical data

Case : Molded plastic, JEDEC SOD-323
Terminals : Solder plated, solderable per MIL-STD-750,
Method 2026
Polarity: Indicated by cathode band
Mounting Position : Any
Weight : 0.000159 ounce, 0.0045 gram

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

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Repetitive peak reverse voltage		V_{RM}			45	V
Continuous reverse voltage		V_R			40	V
Mean rectifying current		I_0			100	mA
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}		1000		mA
Capacitance between terminals	f=1MHz and applied 10VDC reverse voltage	C_T		20		pF
Storage temperature		T_J	-40		+125	$^{\circ}\text{C}$
Operating temperature		T_{STG}	-40		+125	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage	$I_F = 100 \text{ mA DC}$	V_F			0.55	V
Reverse current	$V_R = 10 \text{ V DC}$	I_R			30	μA



RATING AND CHARACTERISTIC CURVES (ASD501V-N)

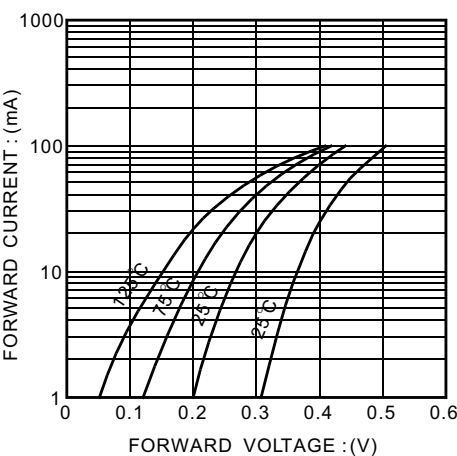


Fig. 1 Forward characteristics

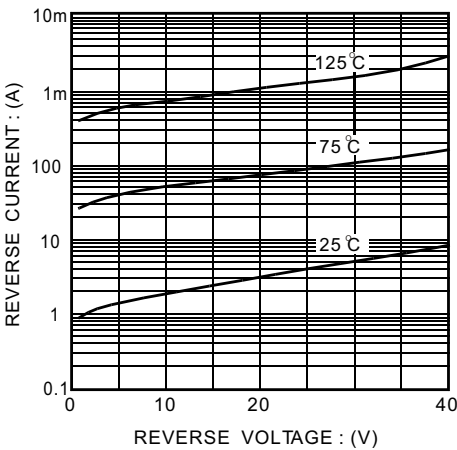


Fig. 2 Reverse characteristics

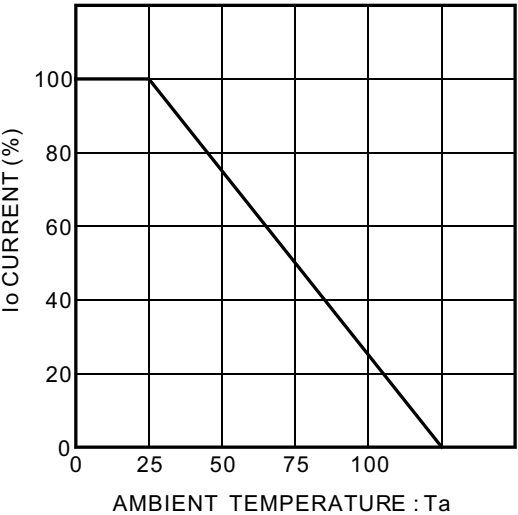


Fig. 4 Derating curve
(mounting on glass epoxy PCBs)

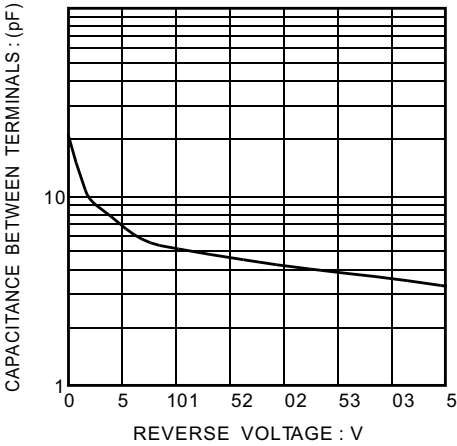


Fig. 3 Capacitance between
terminals characteristics