

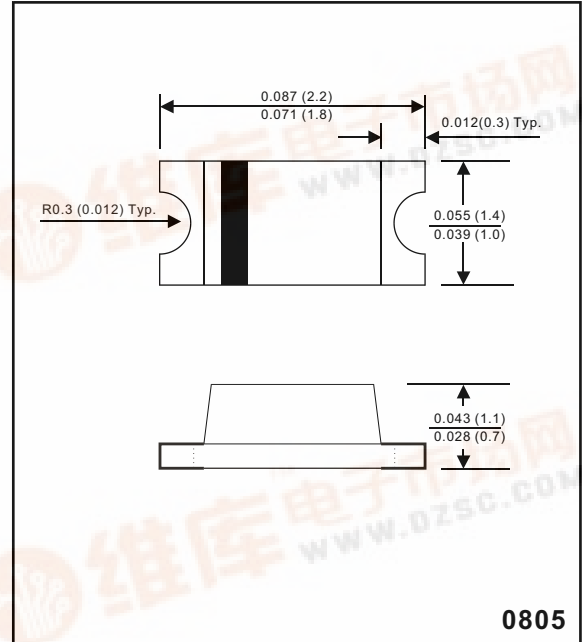
Advanced Schottky Barrier Diodes

Formosa MS

# ASD501V

Surface mount small signal type

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



## Mechanical data

Case : Molded plastic, 0805

Terminals : Solder plated, solderable per ML-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		$I_O$			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	$\mu\text{A}$



RATING AND CHARACTERISTIC CURVES (ASD501V)

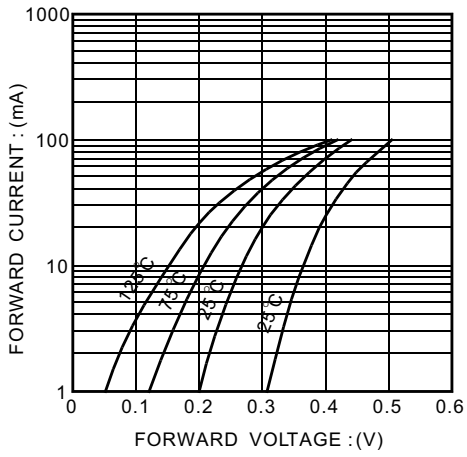


Fig. 1 Forward characteristics

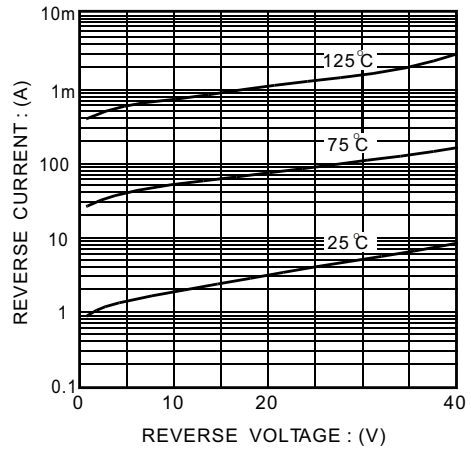


Fig. 2 Reverse characteristics

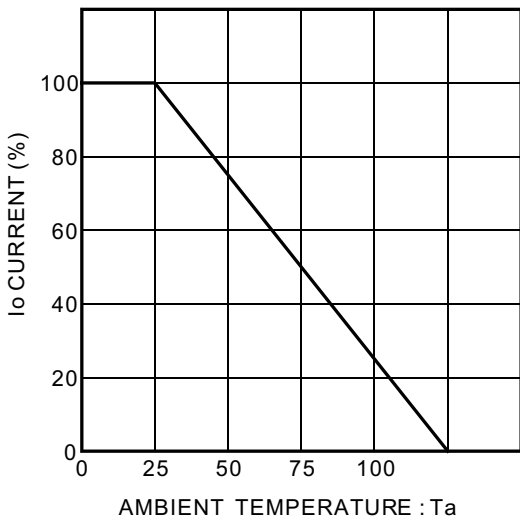


Fig. 4 Derating curve (mounting on glass epoxy PCBs)

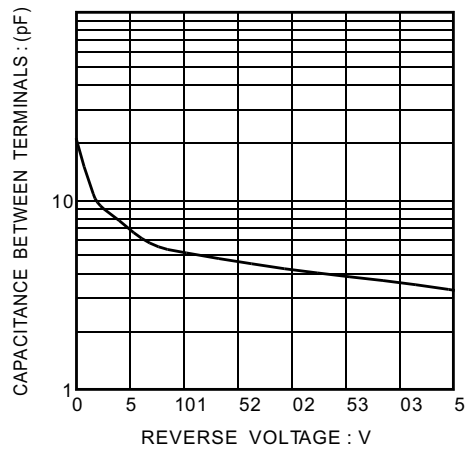


Fig. 3 Capacitance between terminals characteristics