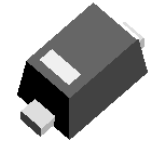


PRIMARY CHARACTERISTICS	
$V_R$	80V
$I_O$	100mA
$V_F$	1.2V
$T_{J,Max}$	150°C

SOD-523 PACKAGE

Marking : A



M = Month Code



FEATURES

- Extremely small surface mounting type.
- High Speed.
- High reliability.
- High speed switching
- A- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.
- Moisture Sensitivity Level 1

MECHANICAL DATA

- Case : Molded plastic, SOD-523
- Polarity : Shown above
- Terminals : Plated terminals, solderable per MIL-STD-750, Method 2026
- Epoxy : UL94-V0 rated flame retardant

Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25$

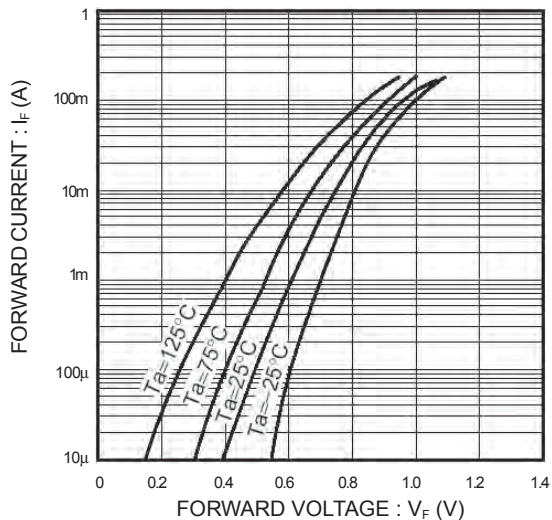
Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	90	V
DC reverse voltage	$V_R$	80	V
Peak forward current	$I_{FM}$	225	mA
Mean rectifying current	$I_O$	100	mA
Surge current (1s)	$I_{surge}$	500	mA
Junction temperature	$T_j$	125	
Operating/Storage temperature	$T_{stg}$	-55~+125	

Electrical Ratings @ $T_A=25$

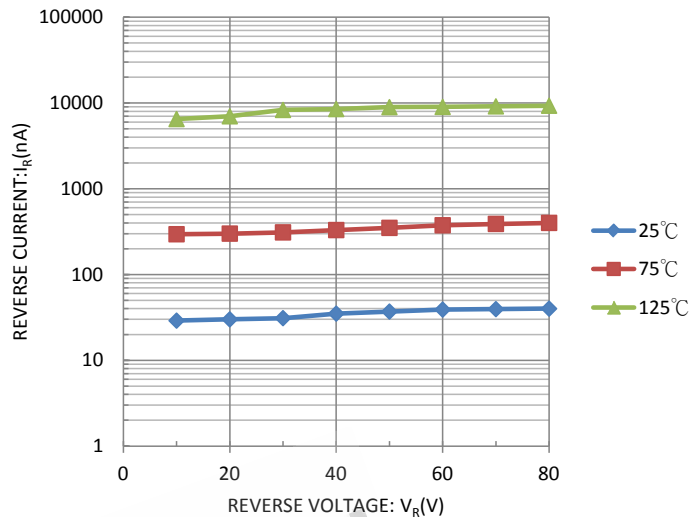
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$			1.2	V	$I_F=100mA$
Reverse current	$I_R$			0.1	$\mu A$	$V_R=80V$
Capacitance between terminals	$C_T$		0.72	3.0	pF	$V_R=0.5V, f=1MHz$
Reverse recovery time	$t_{rr}$			4	ns	$V_R=6V, I_F=10mA, R_L=100$

## ELECTRICAL CHARACTERISTIC CURVES

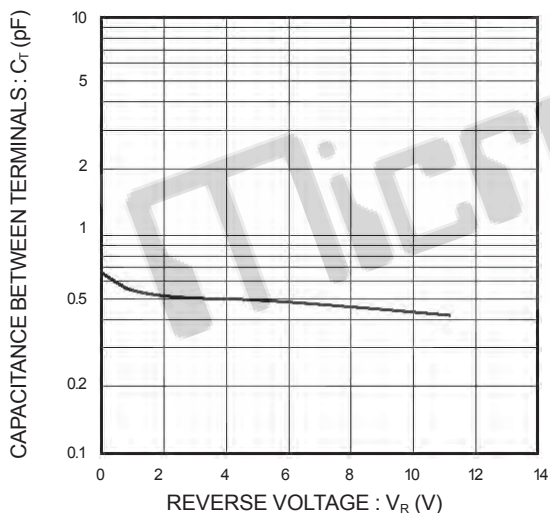
(Ta = 25°C)



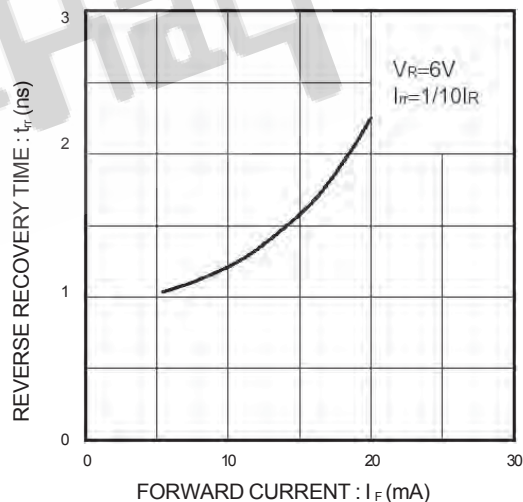
**Fig.1 Forward characteristics**



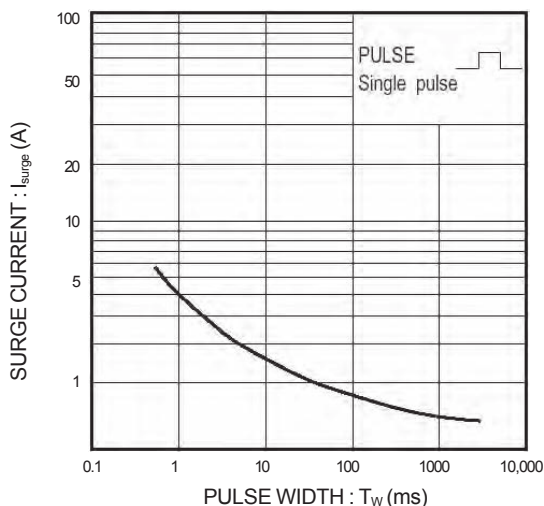
**Fig.2 Reverse characteristics**



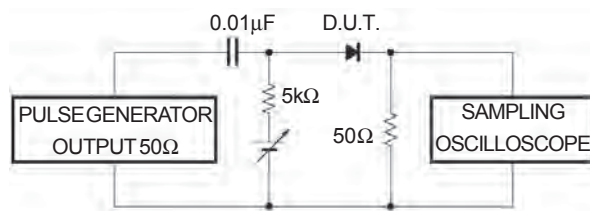
**Fig.3 Capacitance between terminals**



**Fig.4 Reverse recovery time characteristics**



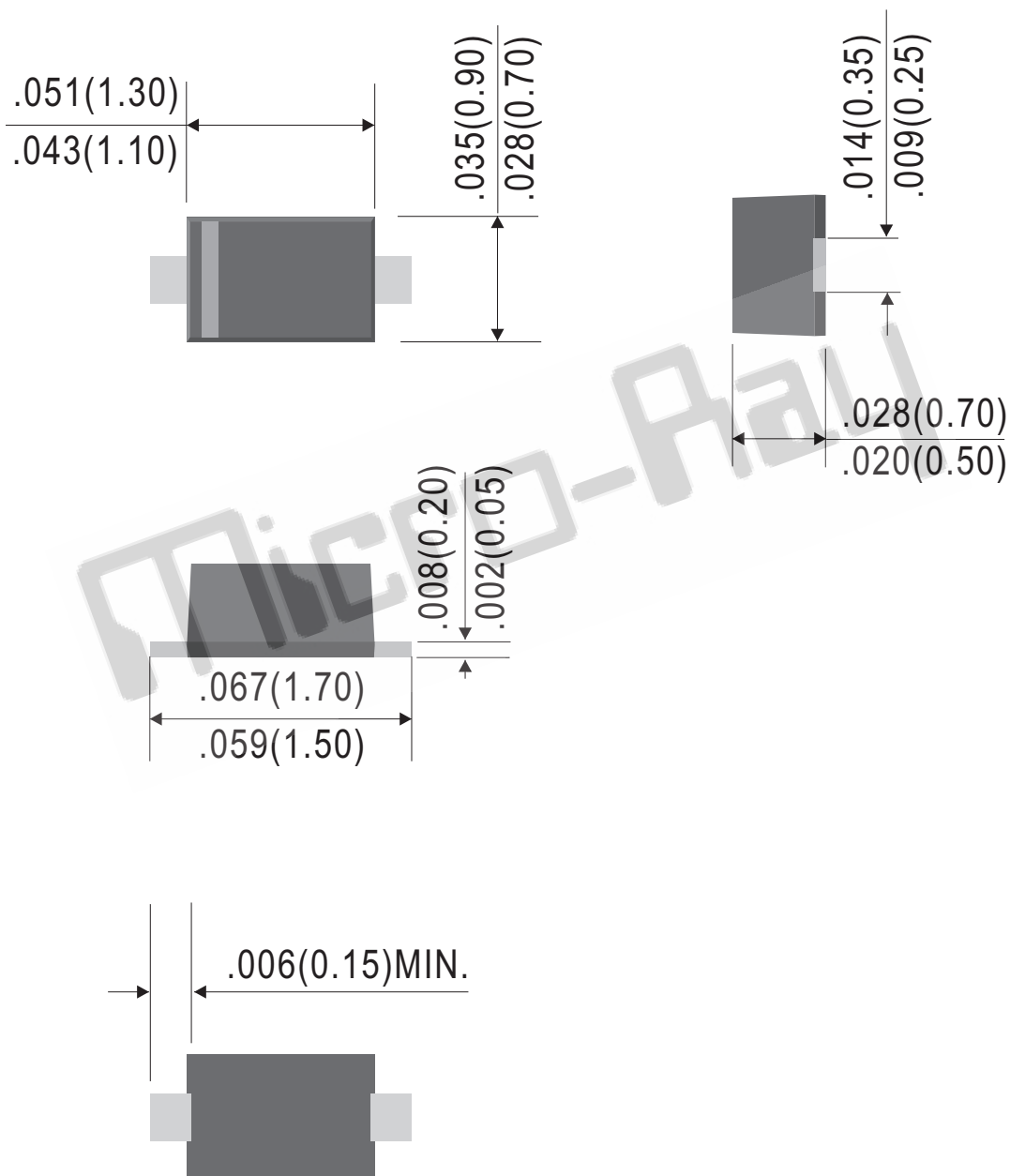
**Fig.5 Surge current characteristics**



**Fig.6 Reverse recovery time (trr) measurement circuit**

# Outline Drawing

# SOD-523



Dimensions in inches and (millimeters)

Rev.C

### Ordering Information:

Device PN	Packing
A-1SS400 -T <sup>(1)</sup> H <sup>(2)</sup> -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) Halogen free product for packing code suffix "H"

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