

# SDS160EWT

for ultra high speed switching application

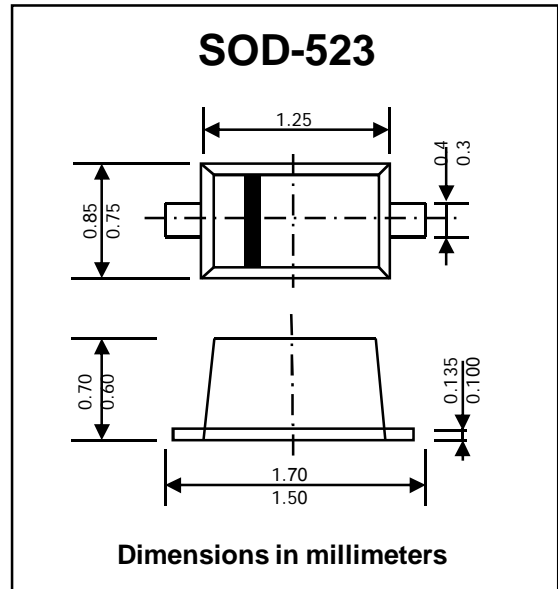
## FEATURES :

- \* Fast reverse recovery time
- \* Small total capacitance
- \* Low forward voltage
- \* Pb / RoHS Free

## MECHANICAL DATA :

- \* Case : SOD-523 plastic Case
- \* Marking Code: "A"

## SILICON EPITAXIAL PLANAR SWITCHING DIODE



## Absolute Maximum Ratings (Ta = 25 °C)

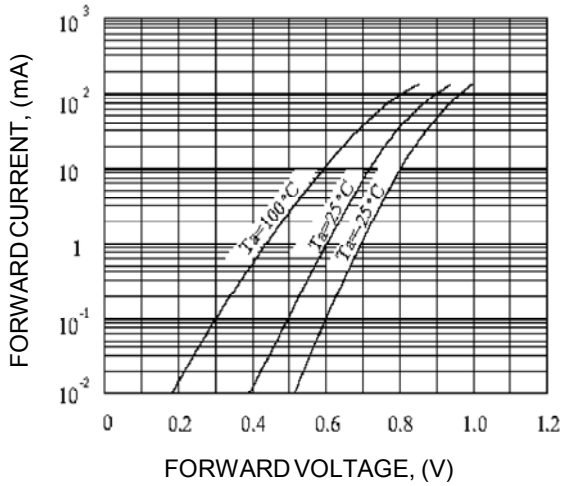
Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	$V_{RM}$	85	V
Maximum Reverse Voltage	$V_R$	80	V
Maximum Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Maximum Peak Forward Current	$I_{FM}$	300	mA
Maximum Forward Surge Current (10 ms)	$I_{FSM}$	2.0	A
Power Dissipation	$P_D$	150	mW
Junction Temperature	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-55 to + 150	°C

## Electrical Characteristics (Ta = 25 °C)

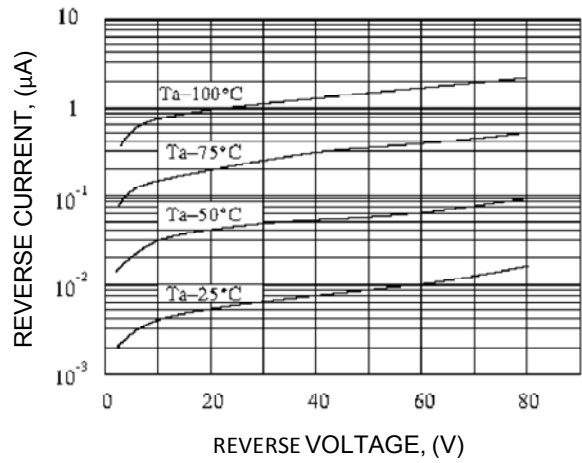
Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100$ mA	$V_F$	1.2	V
Reverse Current at $V_R = 80$ V	$I_R$	0.5	$\mu$ A
Total Capacitance at $V_R = 0$ V, $f = 1$ MHz	$C_T$	3.0	pF
Reverse Recovery Time at $I_{rr} = 0.1 \times I_R$ , $I_F = I_R = 10$ mA, $R_L = 100 \Omega$	$t_{rr}$	4.0	ns

**RATING AND CHARACTERISTIC CURVES ( SDS160EWT )**

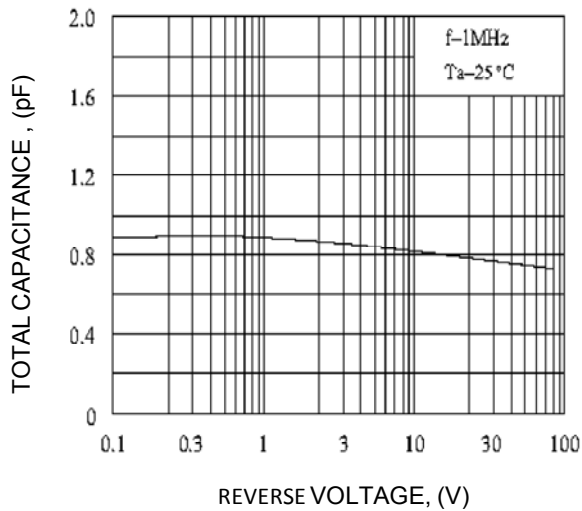
**FIG.1 - FORWARD CURRENT VS. FORWARD VOLTAGE**



**FIG.2 - REVERSE CURRENT VS. REVERSE VOLTAGE**



**FIG.3 - TOTAL CAPACITANCE VS. REVERSE VOLTAGE**



**FIG.4 - REVERSE RECOVERY TIME VS. FORWARD CURRENT**

