

Small Signal Switching Diodes

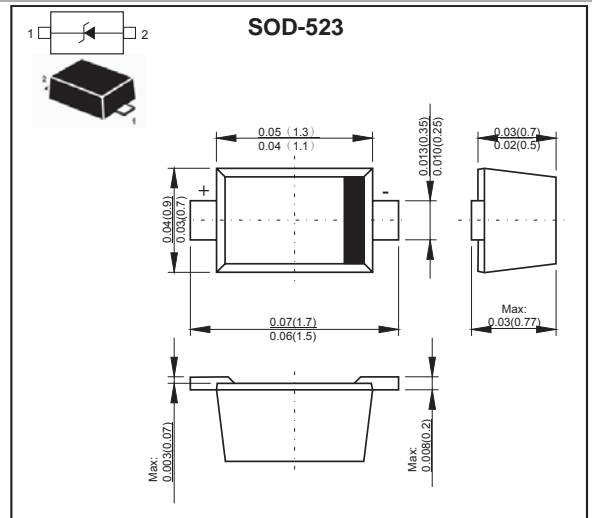
VOLTAGE RANGE: 75V PEAK PULSE POWER: 150mW

FEATURES

- High-Speed Switching Applications
- Lead Finish: 100% Matte Sn (Tin) Qualified
- Reflow Temperature: 260 °C
- Extremely Small SOD-523 Package

MECHANICAL DATA

- Case: SOD-523 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

Symbol	Parameter	Value	Unit
V_R	Reverse Voltage	75	V
I_F	Forward Continuous Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@t= 8.3ms	2	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	833	°C/W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

Electrical Specification ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	75				$I_R=100\mu\text{A}$
Forward voltage	V_{F1}			715	mV	$I_F=1\text{mA}$
	V_{F2}			855		$I_F=10\text{mA}$
	V_{F3}			1000		$I_F=50\text{mA}$
	V_{F4}			1250		$I_F=150\text{mA}$
Reverse recovery Time	t_{rr}			6.0	ns	$I_F=I_R=10\text{mA}$, $R_L=50\Omega$
Reverse current	I_R			1.0	μA	$V_R=75\text{V}$
Forward recovery voltage	V_{FR}			1.75	V	$I_F=10\text{mA}$, $t_r=20\text{ns}$
Diode capacitance	C_D			2.0	pF	$V_R=0\text{V}$, $f=1\text{MHz}$
Stored charge	Q_S			45	pC	$I_F=10\text{mA}$, $V_R=5.0\text{V}$, $R_L=500\Omega$

MARKING: A6

RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics

