

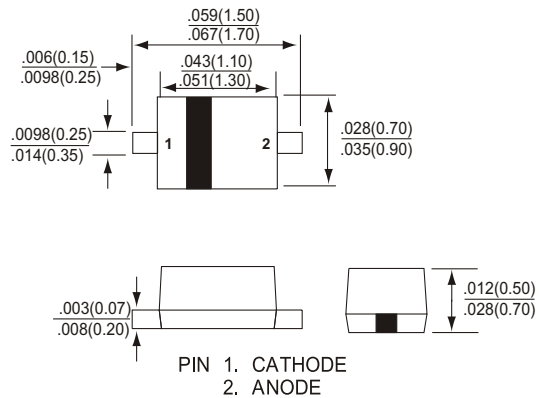
PSD520S thru PSD521S

SURFACE MOUNT SCHOTTKY BARRIER DIODES

SMALL SIGNAL SCHOTTKY DIODES 200m AMPERES 30 VOLTS



SOD-523



FEATURES

- Extremely High Switching Speed
- Low Forward Voltage and Low Reverse Current
- High Reliability.
- Schottky Barrier Diodes Encapsulated in a SOD-523 Package

DESCRIPTION

These schottky barrier diodes are designed for high speed Switching applications circuit protection, and voltage clamping, Extremely low forward voltage reduces conduction loss, Miniature surface mount package is excellent for hand held and Portable applications where space is limited

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

CHARACTERISTICS	SYMBOL	VALUE	UNITS
Reverse Voltage	V_R	30	Volts
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Peak Forward Surge Current ⁽¹⁾	I_{FSM}	1.0	A
Operating Junction Temperature Range	T_J	125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-40 to +125	$^{\circ}\text{C}$

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

CHARACTERISTICS	SYMBOL	Min	Max	UNITS
Reverse Breakdown Voltage ($I_R = 100 \mu\text{A}$)	$V_{(BR)R}$	30		Volts
Forward Voltage $I_F = 200\text{mA}$ PSD520S PSD521S	V_F		0.60 0.50	Volts
Reverse Leakage $V_R = 10\text{V}$ PSD520S PSD521S	I_R		1.0 30.0	μA

NOTE :
1. 60Hz for 1 ϕ

Device Marking

Item	Equivalent Circuit diagram
PSD520S/PSD521S	1  2

PSD520S thru PSD521S

SURFACE MOUNT SCHOTTKY BARRIER DIODES

RATING AND CHARACTERISTICS CURVES PSD520S THRU PSD521S

Electrical characteristic curves ($T_a = 25^\circ\text{C}$)

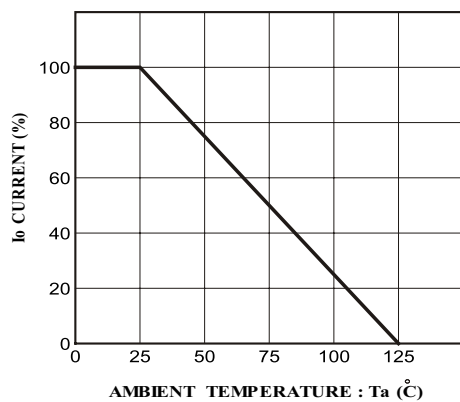


Fig 1. Derating curve
(mounting on glass epoxy PCBs)

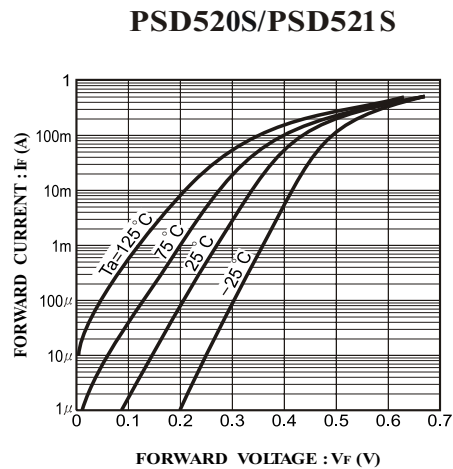


Fig. 2 Forward characteristics

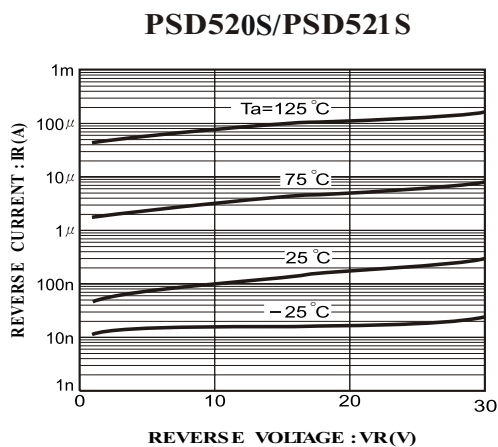


Fig. 3 Reverse characteristics

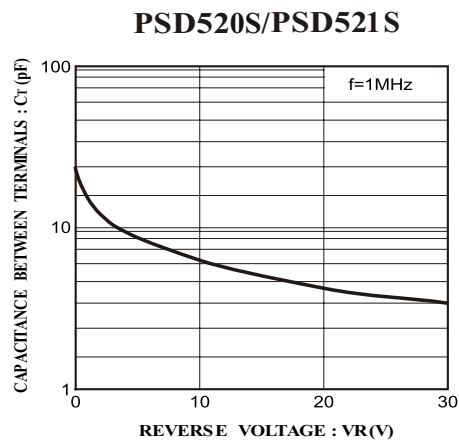


Fig. 4 Capacitance between
terminals characteristics