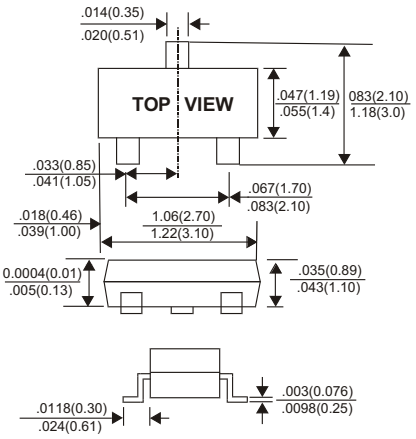
PSD705 thru PSD706

SURFACE MOUNT SCHOTTKY BARRIER DIODES

SMALL SIGNAL SCHOTTKY DIODES 30m AMPERES 40 VOLTS

SOT-23



FEATURES

- Extremely Fast Switching Speed
- Low Forward Voltage
- Very Small Conduction Losses
- Schottky Barrier Diodes Encapsulated in a SOT-23 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

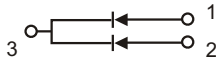
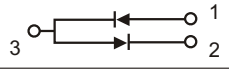
MAXIMUM RATING (T_J=25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	PSD705 / PSD706	UNITS
Reverse Voltage	V_R	40	Volts
Average Rectified Forward Current	$I_{F(AV)}$	30	mA
Peak Rectified Forward Current Rated V_R, Square Wave, 20KHz	I_{FSM}	200	mA
Operating Junction Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	Min	Typ	Max	UNITS
Reverse Breakdown Voltage (I_R = 100 μA)	$V_{(BR)R}$	40	–	–	Volts
Forward Voltage I_F = 1.0mA	V_F	–	–	0.37	Volts
Total Capacitance (V_R = 1.0V, f = 1.0MHz)	C_T	–	2.0	–	pF
Reverse Leakage V_R = 10V	I_R	–	–	1.0	μAdc

Device Marking

Item	Eqivalent Circuit diagram
PSD705	
PSD706	

Electrical characteristic curves (Ta = 25˚C)

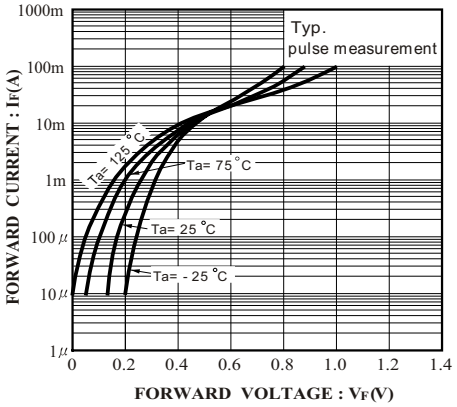


Fig. 1 Forward characteristics

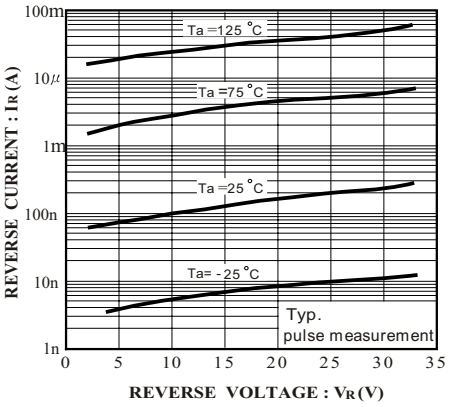


Fig. 2 Reverse characteristics

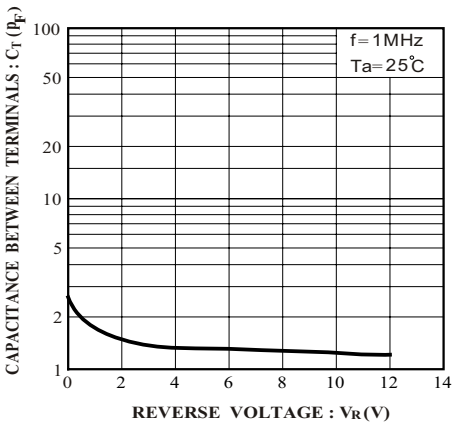


Fig. 3 Capacitance between terminals characteristics