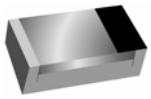
TAIWAN SEMICONDUCTOR

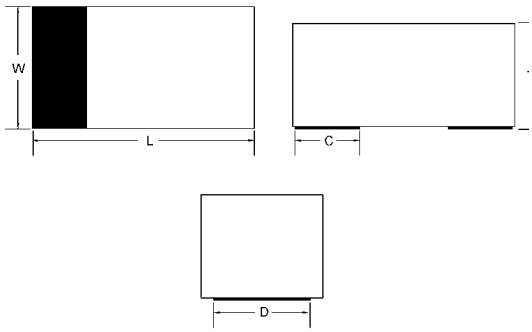
RoHS COMPLIANCE

TSS40L

0.2Amp Surface Mount Schottky Barrier Diode

1005





Features

- ✧ Designed for mounting on small surface
- ✧ Extremely thin/leadless package
- ✧ Low capacitance
- ✧ Low forward voltage drop
- ✧ High temperature soldering: 260°C/10 seconds at terminals
- ✧ Chip version in 1005

Mechanical Data

- ✧ Case: 1005 Standard package, molded plastic
- ✧ Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- ✧ Polarity: Indicated by cathode band
- ✧ Mounting position: Any
- ✧ Package code: RW
- ✧ Weight: 0.006 gram (approximately)

ITEM	1005
L	0.102(2.60) 0.095(2.40)
W	0.051(1.30) 0.043(1.10)
T	0.035(0.90) 0.027(0.70)
C	0.020(0.50) Typical
D	0.040(1.00) Typical

Dimensions in inches and (millimeters)

Maximum Ratings T_A=25 °C unless otherwise specified

Type Number	Symbol	1005	Units
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Reverse Voltage	V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Forward Current	I_O	200	mA
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	600	mA
Power Dissipation	Pd	200	mW
Forward Voltage IF=1.0mA IF=40mA	V_F	0.38 1.0	V
Reverse Leakage Current VR=30V	I_R	0.2	uA
Typical capacitance between terminals VR=0V, f =1.0MHz reverse voltage	C_J	3	pF
Reverse Recovery Time (IF=IR=10mA, Irr=0.1x IR, RL=100Ω)	Trr	5	nS
Junction Temperature	T_J	-65 to + 125	°C
Storage Temperature	T_{STG}	-65 to + 125	°C

RATINGS AND CHARACTERISTIC CURVES(TSS40L)

Fig. 1 - Forward characteristics

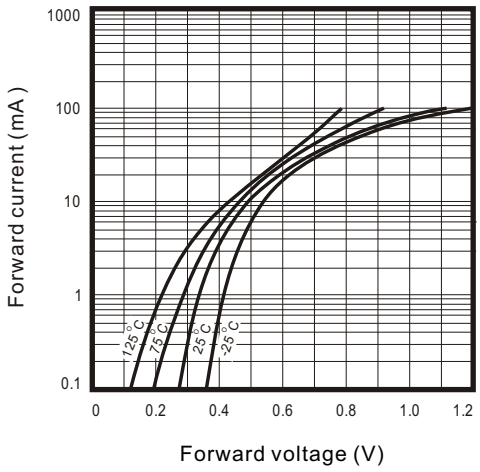


Fig. 2 - Reverse characteristics

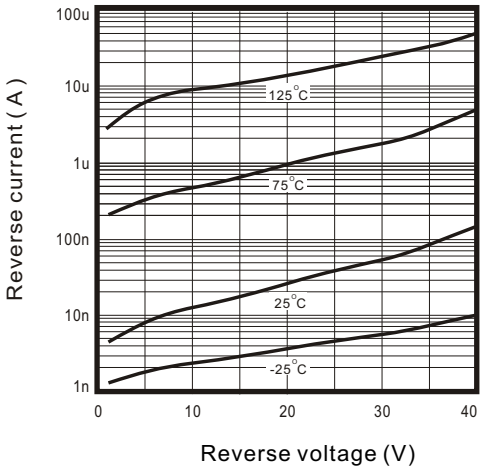


Fig.3 - Capacitance between terminals characteristics

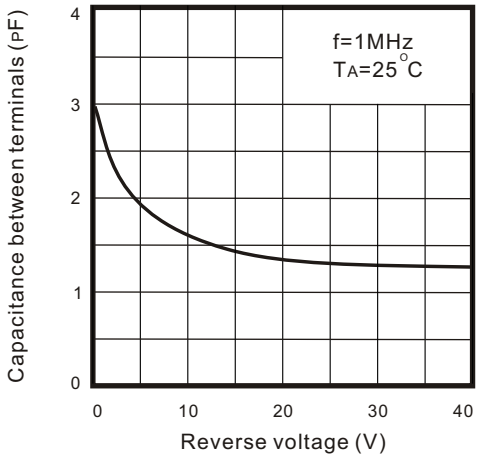
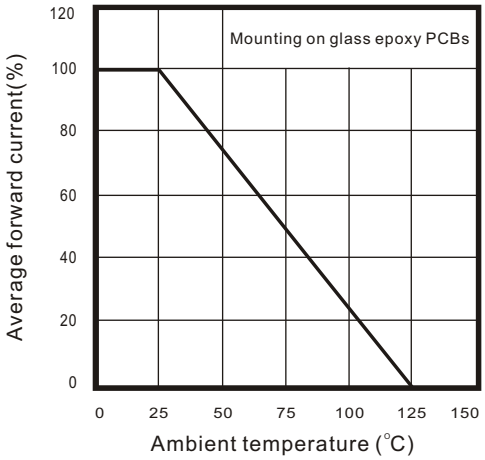



Fig.4 - Current derating curve