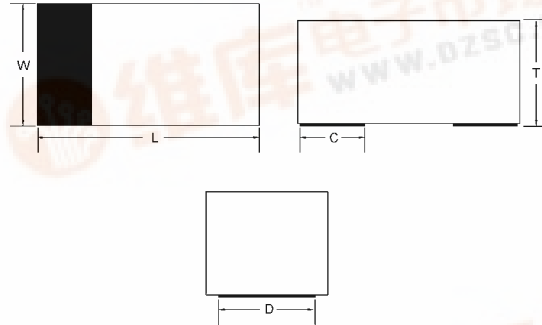




TSS54L

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 $T_A=25^\circ\text{C}$ unless otherwise specified

Type Number	Symbol	1005	Units
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Reverse Voltage	V_R	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Average Forward Current	I_O	200	mA
Repetitive Peak Forward Current	I_{FRM}	0.3	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	600	mA
Power Dissipation	P_d	200	mW
Forward Voltage $I_F=0.1\text{mA}$ $I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=30\text{mA}$ $I_F=100\text{mA}$	V_F	0.24 0.32 0.4 0.5 1.0	V
Reverse Leakage Current $V_R=25\text{V}$	I_R	2	μA
Typical capacitance between terminals $V_R=1\text{V}$, $f=1.0\text{MHz}$ reverse voltage	C_J	10	pF
Reverse Recovery Time ($I_F=I_R=10\text{mA}$, $I_{rr}=0.1 \times I_R$, $R_L=100\Omega$)	T_{rr}	5	nS
Junction Temperature	T_J	-65 to + 125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 to + 125	$^\circ\text{C}$

RATINGS AND CHARACTERISTIC CURVES(TSS54L)

Fig. 1 - Forward characteristics

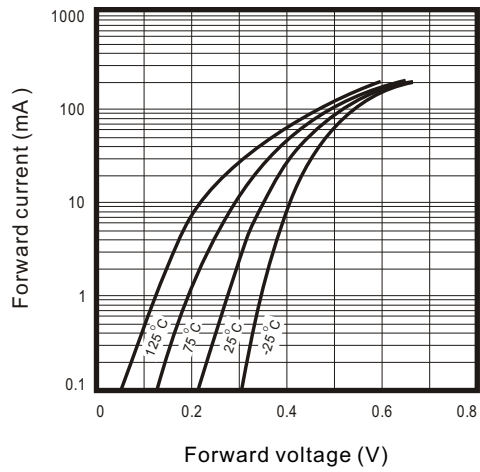


Fig. 2 - Reverse characteristics

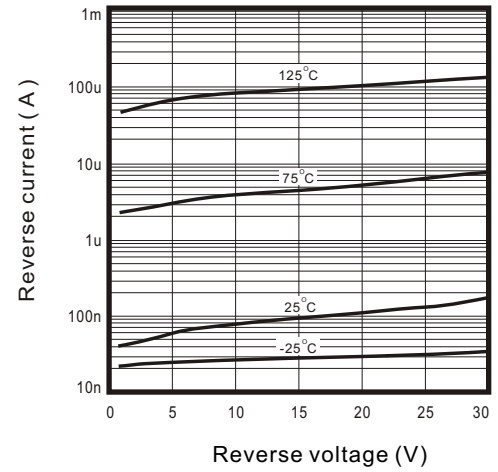


Fig.3 - Capacitance between terminals characteristics

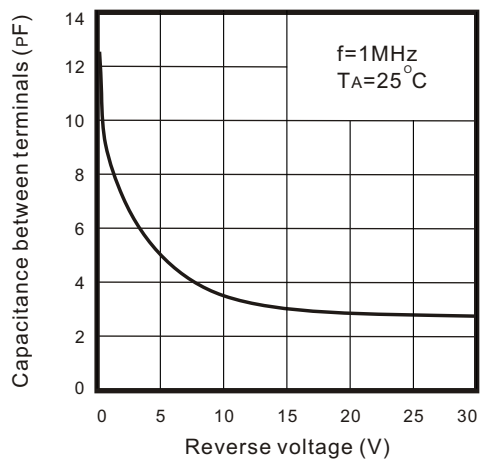


Fig.4 - Current derating curve

