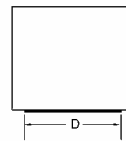
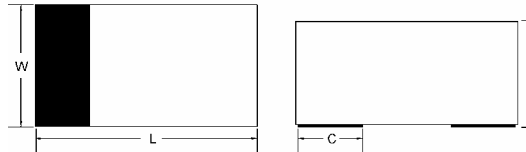


TSS42L/TSS43L

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} | 0.5 | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | I_{FSM} | 400 | mA |
| Power Dissipation | P_d | 200 | mW |
| Forward Voltage TSS42L/43L $I_F=200\text{mA}$ TSS42L $I_F=10\text{mA}$ TSS42L $I_F=50\text{mA}$ TSS43L $I_F=2\text{mA}$ TSS43L $I_F=15\text{mA}$ | V_F | 1.0 0.4 0.65 0.33 0.45 | V |
| Reverse Leakage Current $V_R=25\text{V}$ | I_R | 0.5 | 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 | -55 to + 125 | $^\circ\text{C}$ |
| Storage Temperature | T_{STG} | -55 to + 125 | $^\circ\text{C}$ |

RATINGS AND CHARACTERISTIC CURVES(TSS42L/TSS43L)

Fig. 1 - Forward characteristics

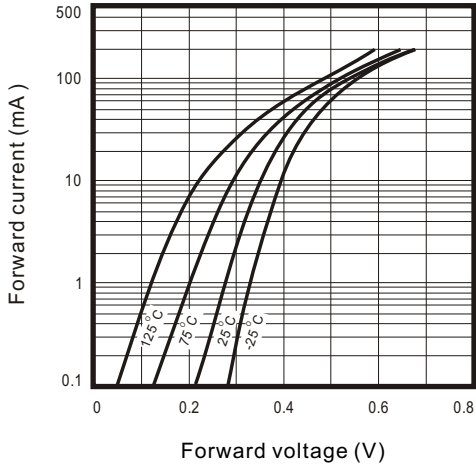


Fig. 2 - Reverse characteristics

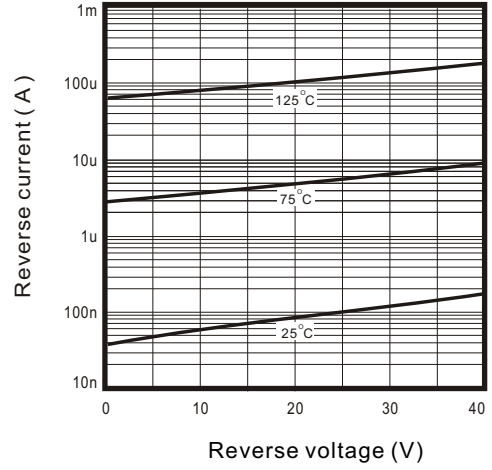


Fig.3 - Capacitance between terminals characteristics

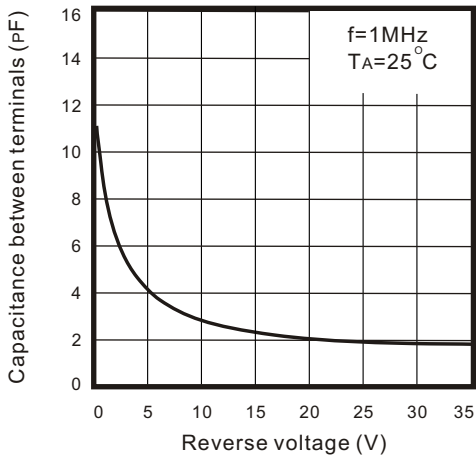


Fig.4 - Current derating curve

