

# **TSS54U** 0.2Amp Surface Mount Schottky Barrier

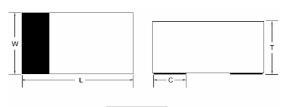
Diode

### **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 0603

### Mechanical Data

- ♦ Case: 0603 Standard package, molded plastic
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- ♦ Polarity: Indicated by cathode band
- Mounting position: Any
- ♦ Package code: RZ
- ♦ Weight: 0.003 gram (approximately)



0603



ITEM	0603		
	0003		
L	0.071(1.80)		
	0.063(1.60)		
w	0.039(1.00)		
	0.031(0.80)		
Т	0.033(0.85)		
	0.027(0.70)		
С	0.018(0.45)		
	Typical		
D	0.028(0.70)		
	Typical		

Dimensions in inches and (millimeters)

## **Maximum Ratings and Electrical characteristics**

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

Type Number		Symbol	0603	Units
Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	30	V
DC Reverse Voltage		V <sub>R</sub>	30	V
RMS Reverse Voltage		V <sub>R(RMS)</sub>	21	V
Average Forward Current		Ι <sub>Ο</sub>	200	mA
Repetiitive Peak Forward Current		I <sub>FRM</sub>	300	mA
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)		I <sub>FSM</sub>	600	mA
Power Dissipation		Pd	150	mW
Forward Voltage	IF=0.1mA IF=1mA IF=10mA IF=30mA IF=100mA	V <sub>F</sub>	0.24 0.32 0.4 0.5 1.0	V
Reverse Leakage Current	VR=25V	I <sub>R</sub>	2	uA
Typical capacitance between terminals VR=1V, f =1.0MHz reverse voltage		CJ	10	pF
Reverse Recovery Time (IF=IR=10mA, Irr=0.1 x IR, RL=100Ω)		Trr	5	nS
Junction Temperature		TJ	-65 to + 125	С°
Storage Temperature		T <sub>STG</sub>	-65 to + 125	°C



#### RATINGS AND CHARACTERISTIC CURVES(TSS54U)

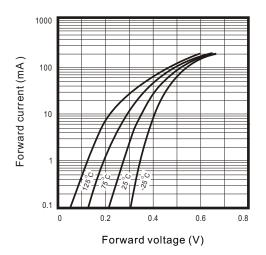
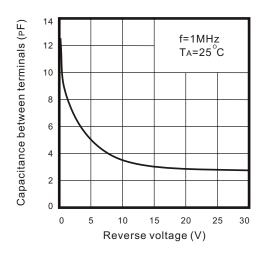


Fig. 1 - Forward characteristics

Fig.3 - Capacitance between terminals characteristics



1m 125 100ı Reverse current (A) 10u 75 1u 25 100r 10n 0 5 10 15 20 25 30 Reverse voltage (V)

#### Fig. 2 - Reverse characteristics

