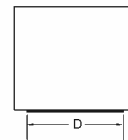
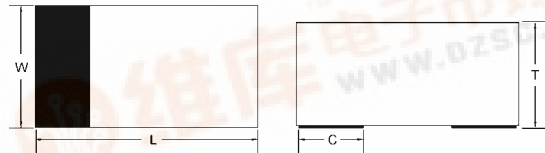




TSS42U/43U

0.2Amp Surface Mount Schottky Barrier Diode

0603



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)

ITEM	0603
L	0.071(1.80) 0.063(1.60)
W	0.039(1.00) 0.031(0.80)
T	0.033(0.85) 0.027(0.70)
C	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.
For capacitive load, derate current by 20%

Type Number	Symbol	0603	Units
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
DC 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}	500	mA
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	4	A
Power Dissipation	P_d	150	mW
Forward Voltage	V_F	1.0 0.4 0.65 0.33 0.45	V
Reverse Leakage Current $V_R=25V$	I_R	0.5	uA
Typical capacitance between terminals $V_R=1V, f=1.0MHz$ reverse voltage	C_J	10	pF
Reverse Recovery Time (IF=IR=10mA, Irr=0.1 x IR, RL=100Ω)	T_{rr}	5	nS
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	667	°C/W
Junction Temperature	T_J	-65 to + 125	°C
Storage Temperature	T_{STG}	-65 to + 125	°C



RATINGS AND CHARACTERISTIC CURVES(TSS42U)

Fig. 1 - Forward characteristics

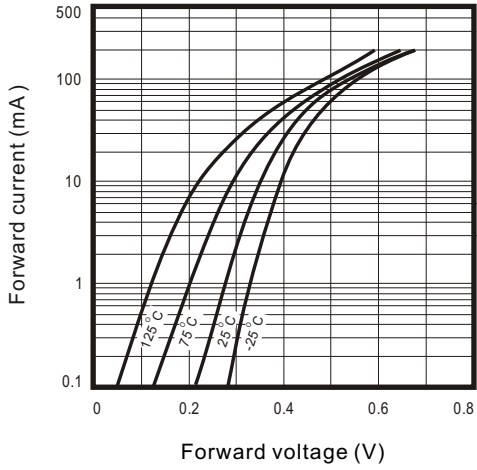


Fig. 2 - Reverse characteristics

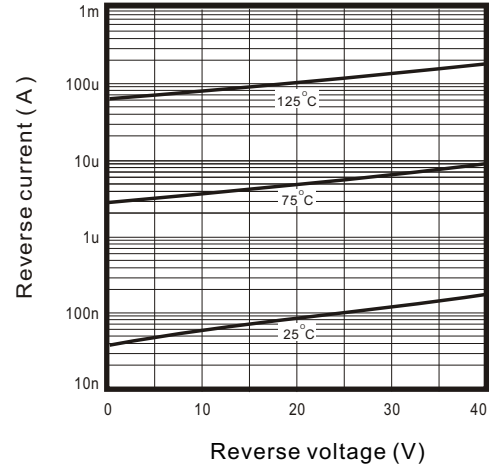


Fig.3 - Capacitance between terminals characteristics

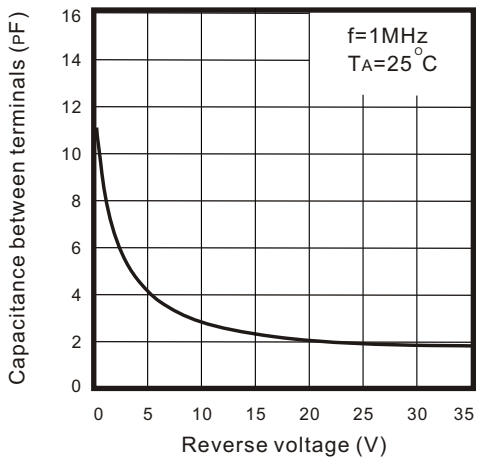


Fig.4 - Current derating curve

