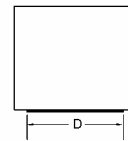
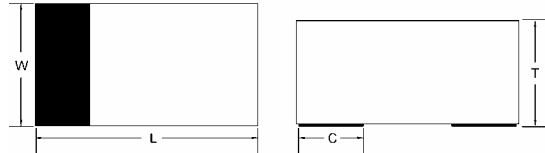


TSS42U/43U

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	TSS42U/43U IF=200mA	1.0
		TSS42U IF=10mA	0.4
		TSS42U IF=50mA	0.65
		TSS43U IF=2mA	0.33
		TSS43U IF=15mA	0.45
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 ($I_F=I_R=10mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$)	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

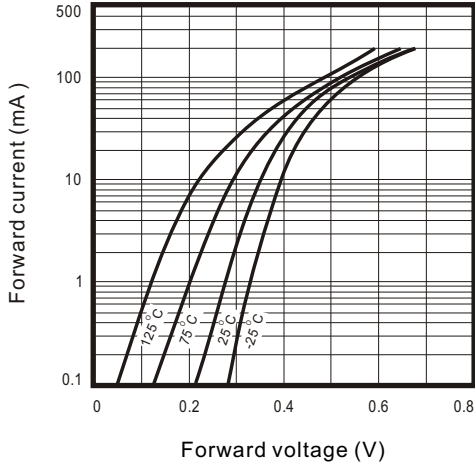


Fig. 2 - Reverse characteristics

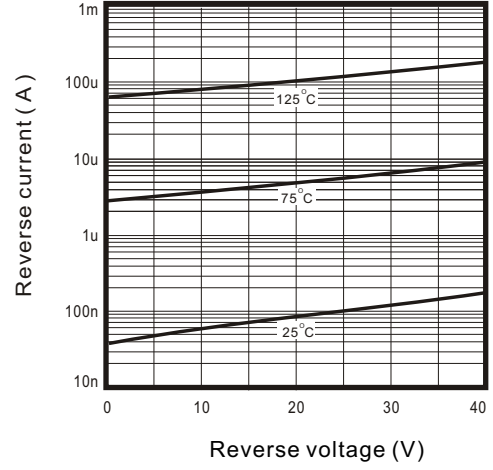


Fig.3 - Capacitance between terminals characteristics

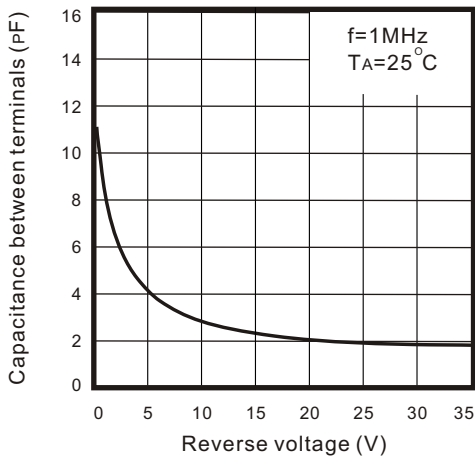


Fig.4 - Current derating curve

