

## CDBU54

**$I_o = 200\text{ mA}$**   
 **$V_R = 30\text{ Volts}$**   
**RoHS Device**

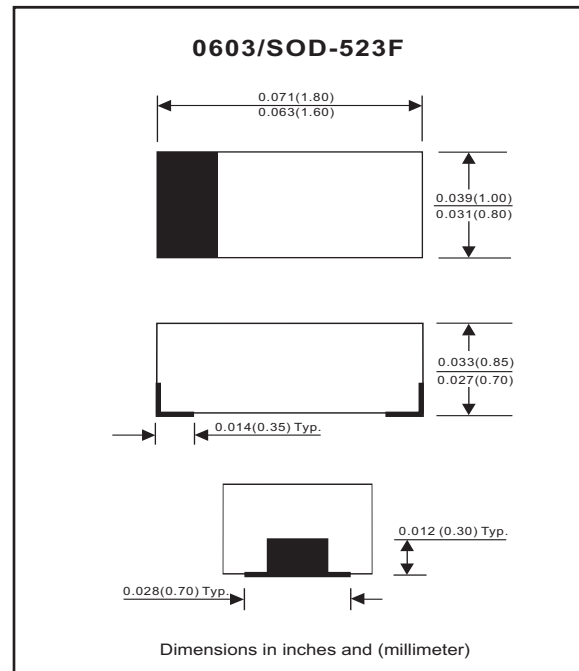


### Features

- Low forward voltage.
- Designed for mounting on small surface.
- Extremely thin / leadless package.
- Majority carrier conduction.

### Mechanical data

- Case: 0603/SOD-523F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any.
- Weight: 0.003 gram(approx.).



### Maximum Rating (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Peak reverse voltage		$V_{RM}$			30	V
Reverse voltage		$V_R$			30	V
RMS reverse voltage		$V_{R(RMS)}$			21	V
Average forward rectified current		$I_o$			200	mA
Repetitive peak forward current		$I_{FRM}$			0.3	A
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	$I_{FSM}$			0.6	A
Power dissipation		$P_D$			150	mW
Storage temperature		$T_{STG}$	-65		+125	$^\circ\text{C}$
Junction temperature		$T_j$			+125	$^\circ\text{C}$

### Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
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	V
Reverse current	$V_R = 25\text{V}$	$I_R$			2	$\mu\text{A}$
Capacitance between terminals	$f = 1\text{ MHz}$ , and 1 VDC reverse voltage	$C_T$			10	pF
Reverse recovery time	$I_F=I_R=10\text{mA}$ , $I_{rr}=0.1 \times I_R$ , $R_L=100\text{ Ohm}$	$T_{rr}$			5	nS

## RATING AND CHARACTERISTIC CURVES (CDBU54)

Fig. 1 - Forward characteristics

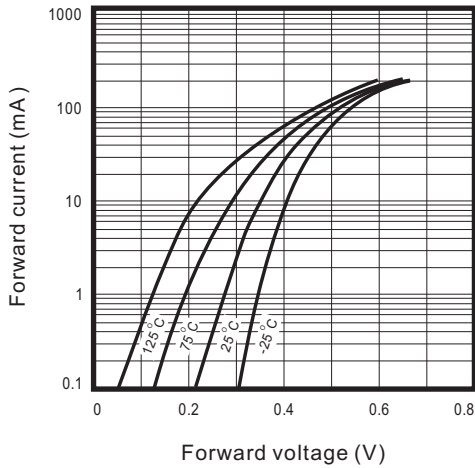


Fig. 2 - Reverse characteristics

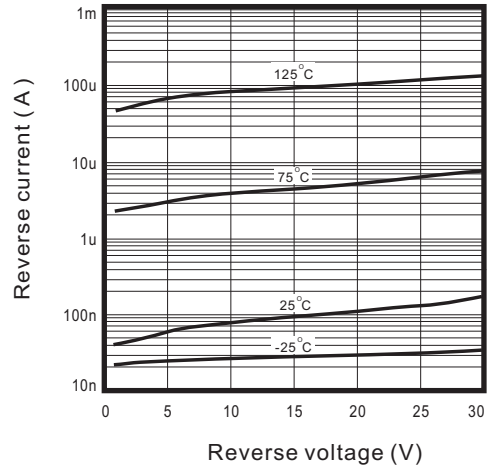


Fig.3 - Capacitance between terminals characteristics

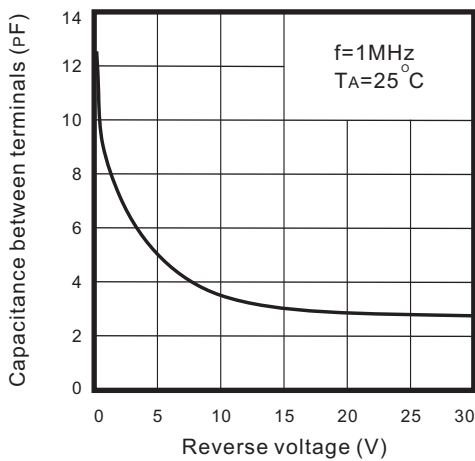


Fig.4 - Current derating curve

