

## CDBU0145

**$I_o = 100 \text{ mA}$**   
 **$V_R = 45 \text{ Volts}$**   
**RoHS Device**

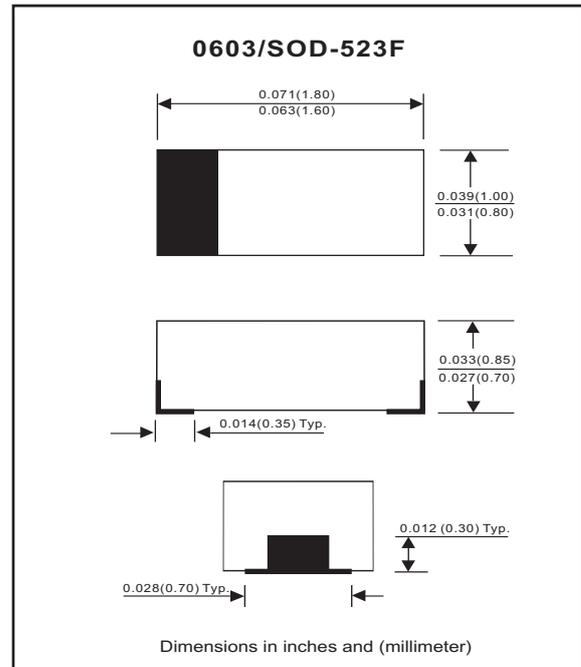


### Features

- Designed for mounting on small surface.
- Extremely thin/leadless package.
- Low leakage current.  
( $I_R=0.1\mu\text{A typ.}@V_R=10\text{V}$ )
- 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
Repetitive peak reverse voltage		$V_{RRM}$			50	V
Reverse voltage		$V_R$			45	V
Average forward current		$I_o$			100	mA
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	$I_{FSM}$		1000		mA
Power Dissipation		$P_D$			150	mW
Storage temperature		$T_{STG}$	-40		+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	$I_F = 100 \text{ mA DC}$	$V_F$			0.55	V
Reverse current	$V_R = 10\text{V}$	$I_R$			1	$\mu\text{A}$
Capacitance between terminals	$F = 1 \text{ MHz}$ and 10 VDC reverse voltage	$C_T$		9		pF

## RATING AND CHARACTERISTIC CURVES (CDBU0145)

Fig. 1 - Forward characteristics

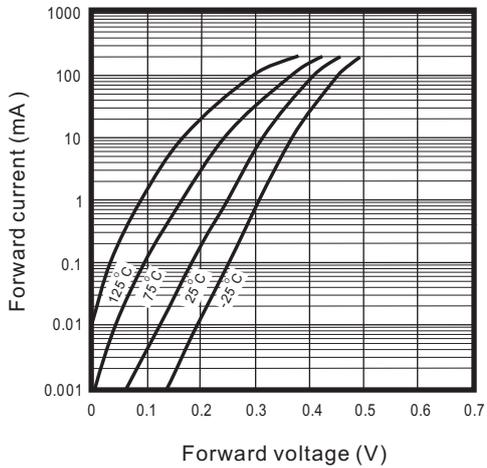


Fig. 2 - Reverse characteristics

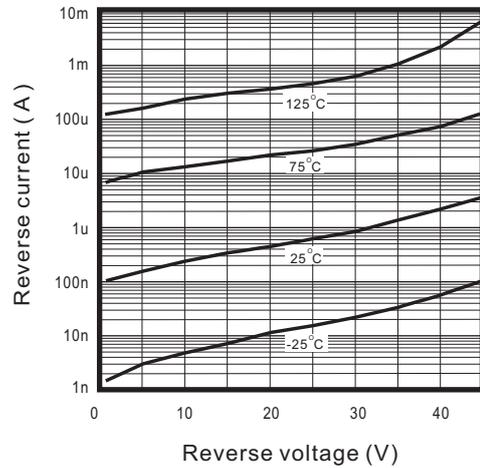


Fig.3 - Capacitance between terminals characteristics

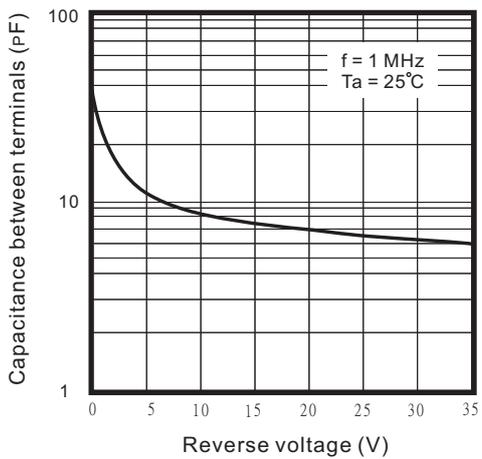


Fig.4 - Current derating curve

