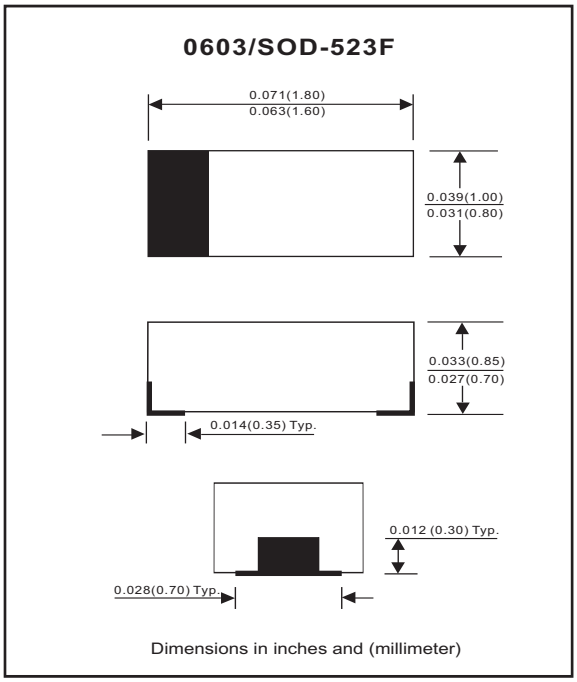
CDBU42/43

Io = 200 mA
VR = 30 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°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}			0.5	A
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	I_{FSM}			4	A
Power dissipation		P_D			150	mW
Thermal resistance junction to ambient air		$R_{\theta JA}$			667	°C/W
Storage temperature		T_{STG}	-55		+125	°C
Junction temperature		T_j			+125	°C

Electrical Characteristics (at T_A=25°C unless otherwise noted)

Parameter		Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	CDBU42/43	I_F = 200mA	V_F			1	V
	CDBU42	I_F = 10mA				0.4	
	CDBU42	I_F = 50mA				0.65	
	CDBU43	I_F = 2mA				0.33	
	CDBU43	I_F = 15mA				0.45	
Reverse current		V_R = 25V	I_R			0.5	uA
Capacitance between terminals		f = 1 MHz, and 1 VDC reverse voltage	C_T			10	pF
Reverse recovery time		I_F=I_R=10mA,Irr=0.1xIR,RL=100 ohm	T_{rr}			5	nS

RATING AND CHARACTERISTIC CURVES (CDBU42/43)

Fig. 1 - Forward characteristics

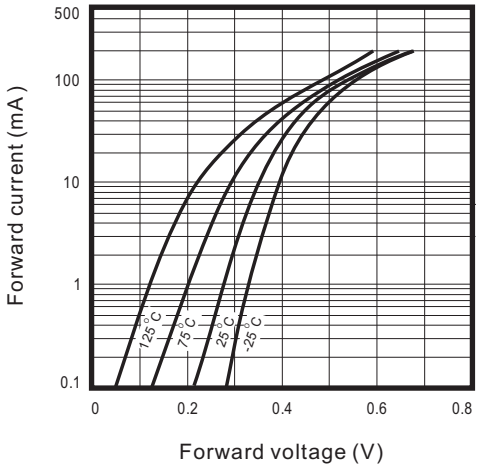


Fig. 2 - Reverse characteristics

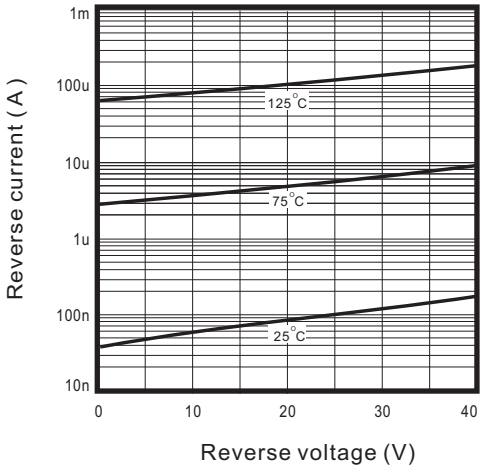


Fig.3 - Capacitance between terminals characteristics

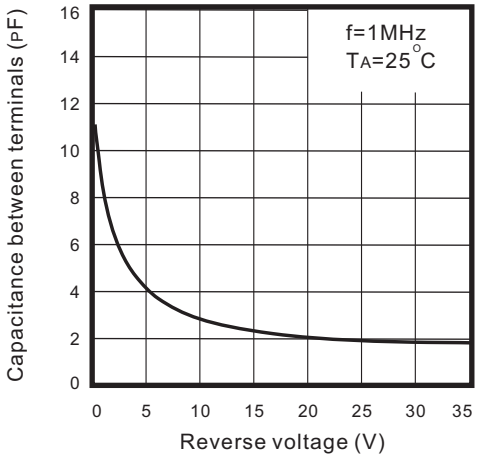


Fig.4 - Current derating curve