

SMD Schottky Barrier Diode

Comchip
SMD Diode Specialist

CDBU42/43

I_o = 200 mA

V_R = 30 Volts

RoHS Device

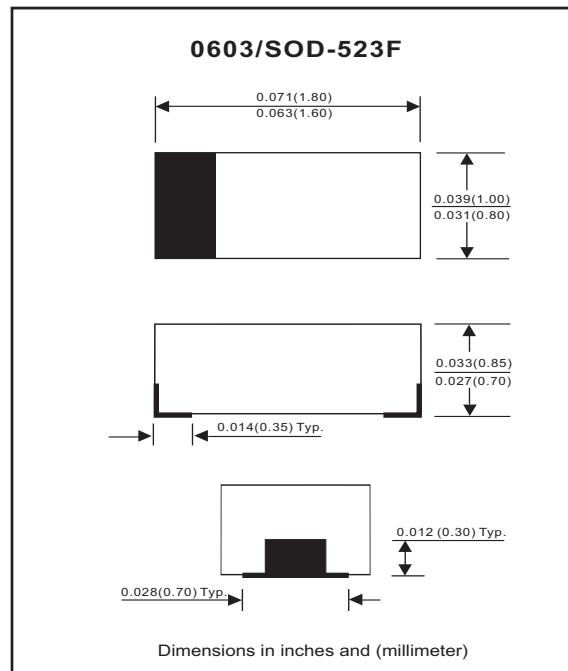


Features

- 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 TA=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 _{θJA}			667	°C/W
Storage temperature		T _{STG}	-55		+125	°C
Junction temperature		T _j			+125	°C

Electrical Characteristics (at TA=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,I _{rr} =0.1xI _R ,RL=100 ohm	T _{rr}			5	nS

REV:A

RATING AND CHARACTERISTIC CURVES (CDBU42/43)

Fig. 1 - Forward characteristics

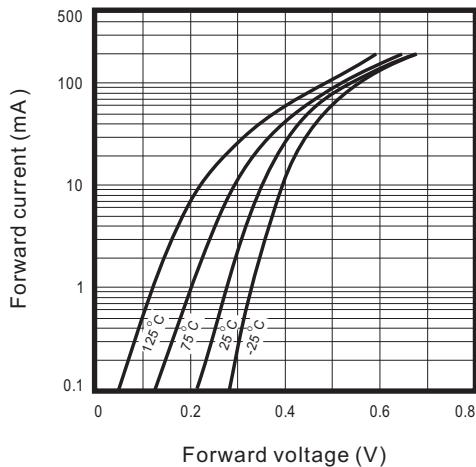


Fig. 2 - Reverse characteristics

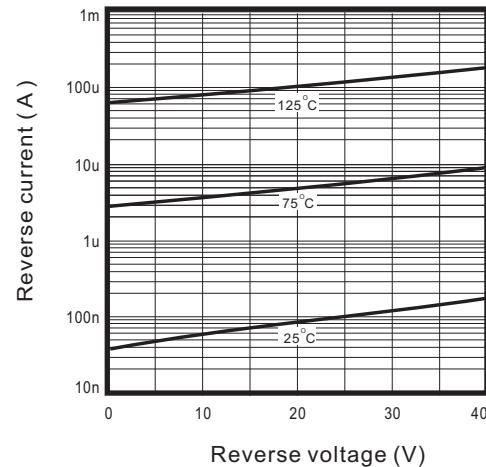


Fig.3 - Capacitance between terminals characteristics

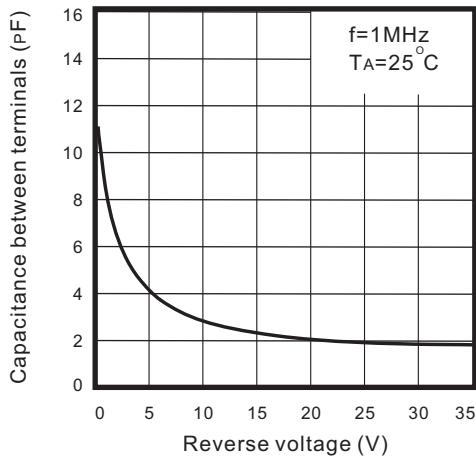


Fig.4 - Current derating curve

