

Main Product Characteristics

$I_{F(AV)}$	2A
V_{RRM}	30V
T_J	125°C
$V_{F(Typ)}$	0.36V

Features

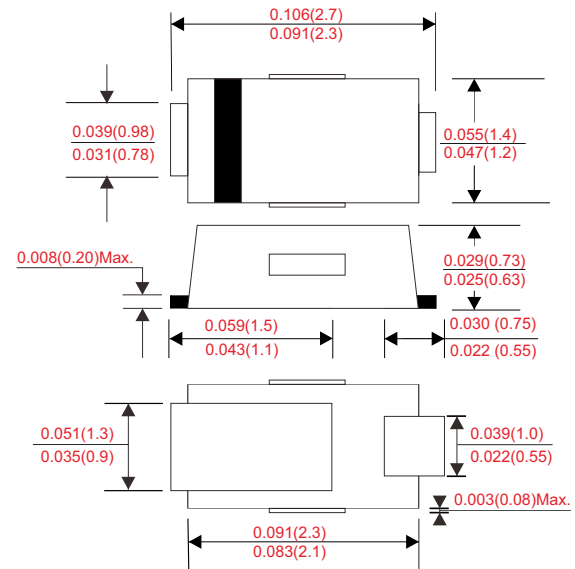
- Ultra small surface mount package.
- Low forward voltage drop.
- Lead free in compliance with EU RoHS.

Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, SOD-323ST
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Weight : Approximated 0.008 gram

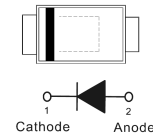
Outline

SOD-323ST



Dimensions in inches and (millimeters)

Circuit Diagram



Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Parameter	Conditions	Symbol	CB230WSG-ST	UNIT
Working peak reverse voltage		V_{RWM}	30	V
Forward rectified current		I_O	2	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	25	A
Peak repetitive reverse surge current	2us - 1kHz	I_{RRM}	2	A
Typical Thermal resistance	Junction to ambient	$R_{\theta JA}$	700	°C/W
Storage temperature		T_{STG}	-55 ~ +150	°C
Operating Junction temperature		T_J	-55 ~ +125	°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage drop	$I_F = 1A, T_J = 25^\circ C$	V_F		390	440	mV
	$I_F = 2A, T_J = 25^\circ C$			425	500	
	$I_F = 2A, T_J = 125^\circ C$			360	380	
Reverse current	$V_R = 5V, T_J = 25^\circ C$	I_R		0.01	0.08	mA
	$V_R = 30V, T_J = 25^\circ C$			0.02	0.1	
	$V_R = 30V, T_J = 125^\circ C$			5	30	
Reverse Breakdown Voltage	$I_R = 0.5mA, T_J = 25^\circ C$	V_{BR}	30			V

Rating and characteristic curves

Fig. 1 - Forward Characteristics

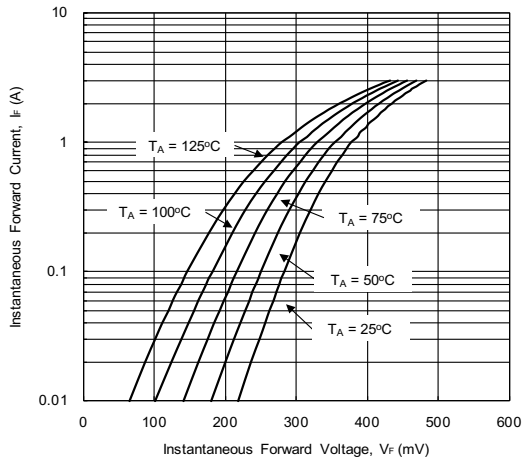


Fig. 2 - Reverse Characteristics

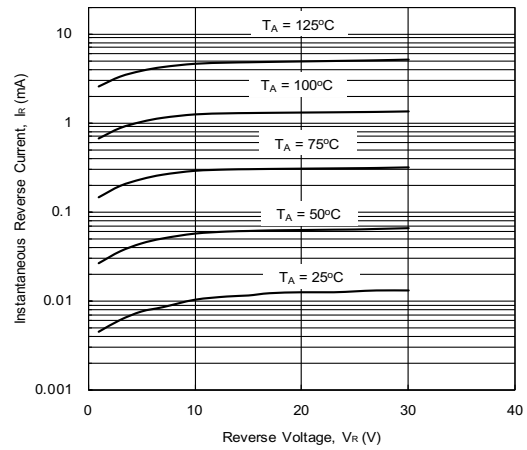


Fig. 3 - Forward Power Dissipation

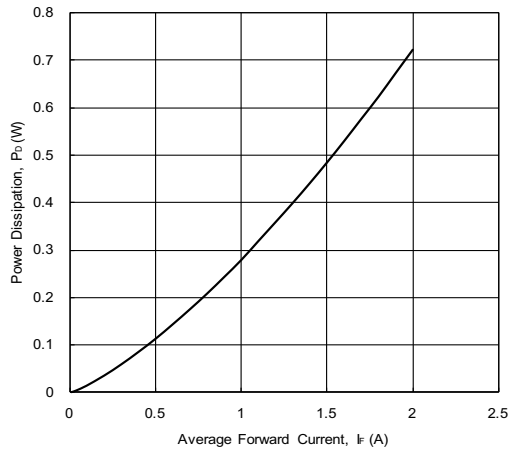


Fig. 4 - Forward Current Derating Curve

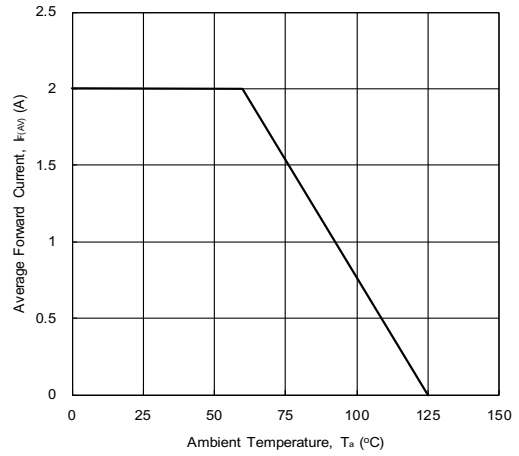
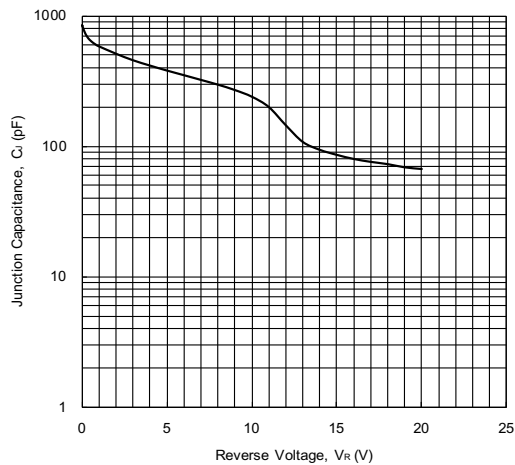
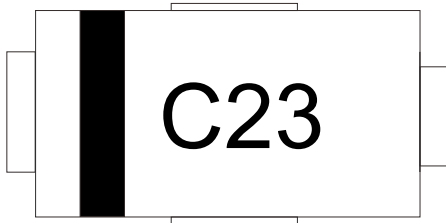


Fig. 5 - Junction Capacitance



■Marking information



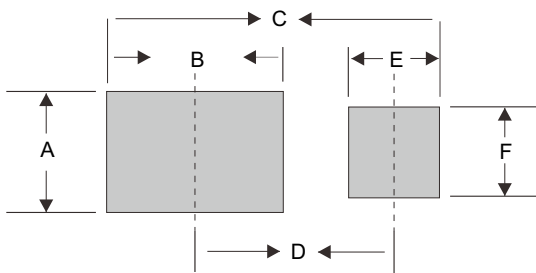
C23: Product type marking code

■Ordering/Packing information

	Part number	Case	Q'TY/Reel (PCS)	Q'TY/Box (PCS)	Q'TY/Carton(PCS)
Halogen free	CB230WSG-ST	SOD-323S	3,500	35,000	280,000

Notes : 1. For packaging details, please reference our website at <http://www.citcorp.com.tw/tchinese/products/index.php>

■SOD-323ST foot print



A	B	C	D	E	F
0.043 (1.10)	0.073 (1.85)	0.126 (3.20)	0.072 (1.825)	0.035 (0.90)	0.039 (1.00)

Dimensions in inches and (millimeters)

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