



SANYO Semiconductors

DATA SHEET

SB0503EJ

 — Schottky Barrier Diode
30V, 500mA Rectifier

Applications

- High frequency rectification (switching regulators, converters, choppers).

Features

- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.
- Ultraminiature (1608 size) and thin (0.6mm) leadless package.

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		30	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		35	V
Average Output Current	IO		500	mA
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	5	A
Junction Temperature	TJ		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	VR	IR=150μA	30			V
Forward Voltage	VF	IF=500mA			0.55	V
Reverse Current	IR	VR=15V			15	μA
Reverse Recovery Time	trr	IF=IR=10mA, See specified Test Circuit.			10	ns
Interterminal Capacitance	C	VR=10V, f=1MHz		16.5		pF
Thermal Resistance	Rth(j-a)	Mounted on a ceramic board (250mm²×0.8mm)		200		°C / W

Marking : DD

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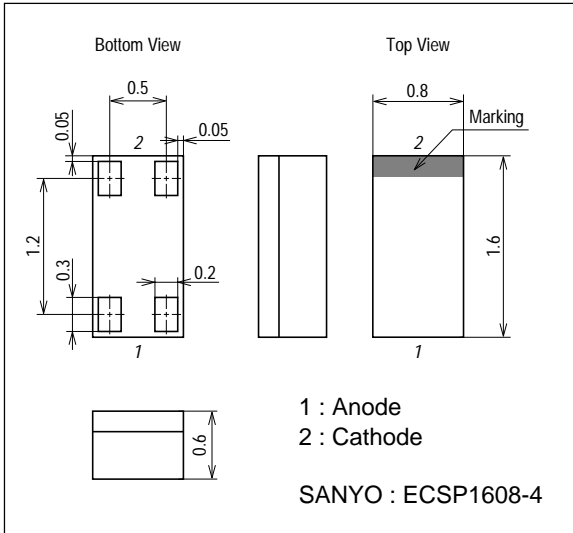
SANYO Electric Co., Ltd. Semiconductor Company

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

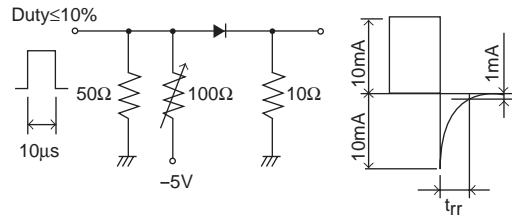
SB0503EJ

Package Dimensions

unit : mm
1332



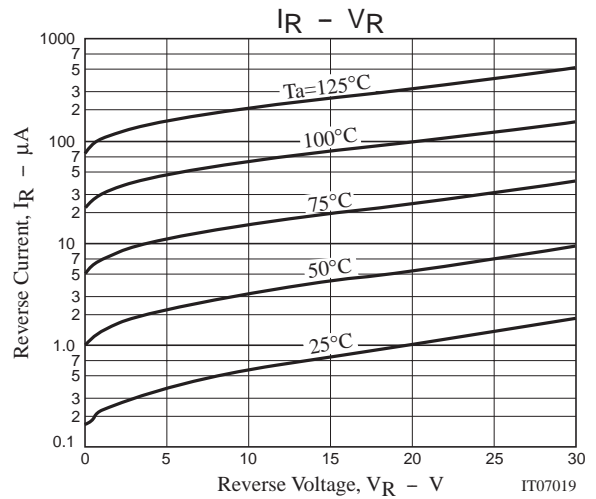
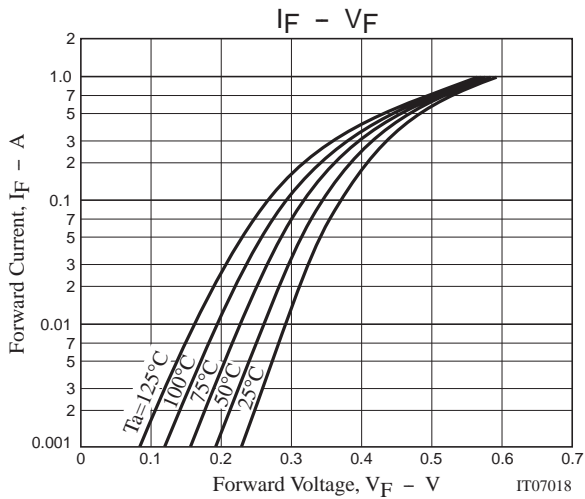
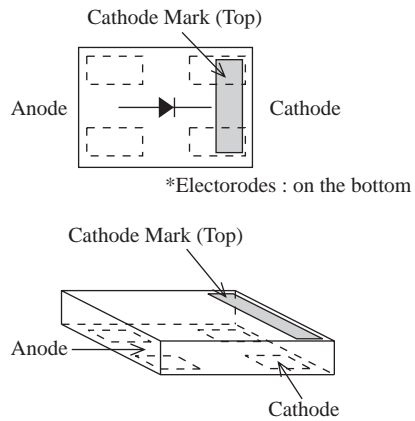
t_{rr} Test Circuit

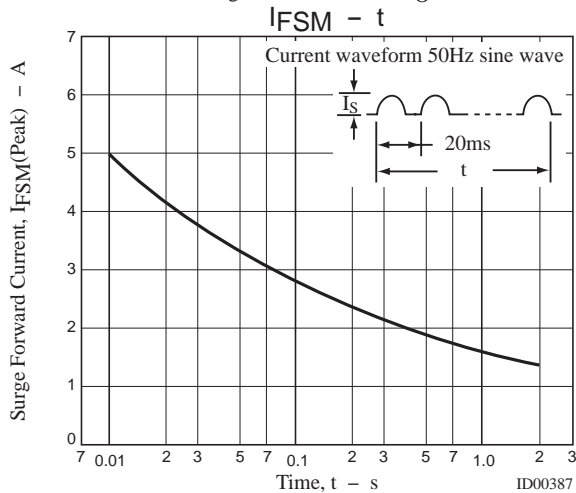
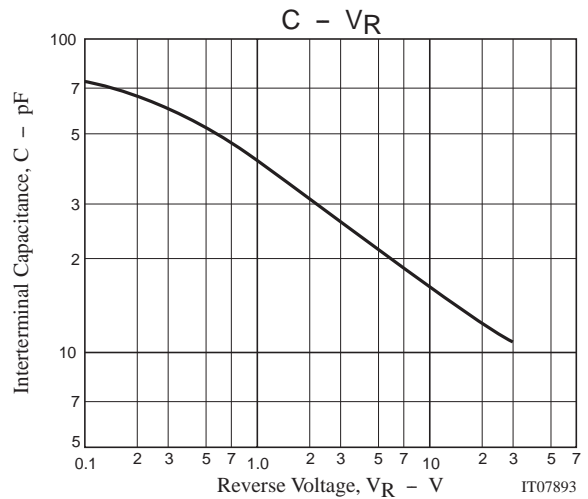
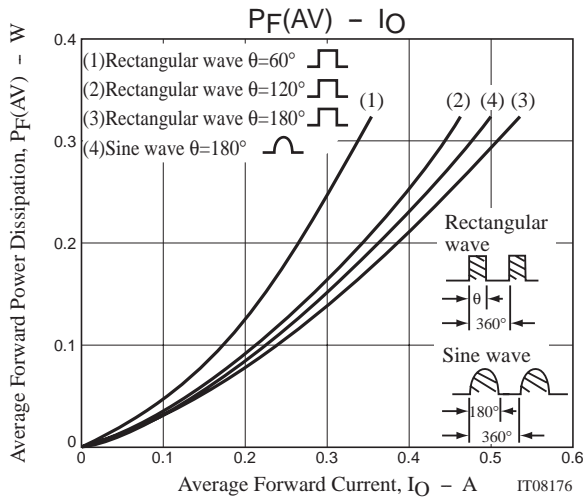


Type No. Indication (Top view)



Electrical Connection (Top view)





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