



SANYO Semiconductors

DATA SHEET

SS0503EC

Low V_F Schottky Barrier Diode
30V, 0.5A 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 (1008 size) and thin (0.6mm) leadless package.

Specifications

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		30	V
Average Output Current	I_O		0.5	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	5	A
Junction Temperature	T_J		-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +125	$^\circ\text{C}$

Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=0.2\text{mA}$	30			V
Forward Voltage	V_{F1}	$I_F=0.1\text{A}$		0.31	0.36	V
	V_{F2}	$I_F=0.5\text{A}$		0.51	0.56	V
Reverse Current	I_R	$V_R=15\text{V}$			100	μA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		6		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)}$	Mounted in Cu-foiled area of $0.72\text{mm}^2 \times 0.03\text{mm}$ on glass epoxy board		70		$^\circ\text{C} / \text{W}$

Marking : DB

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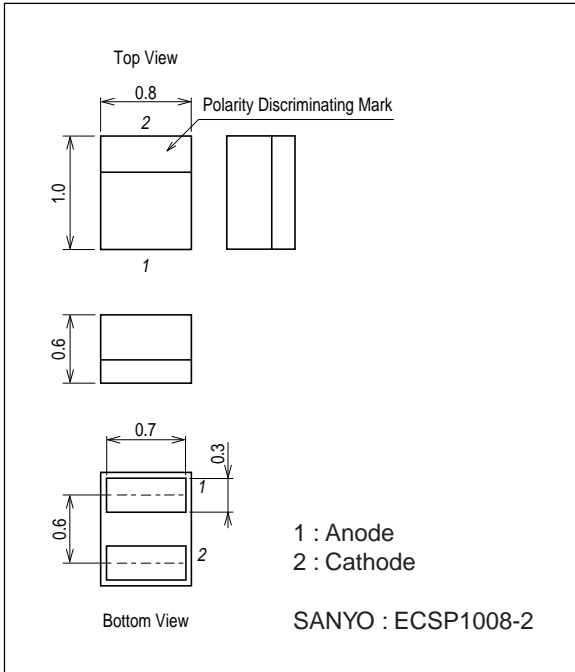
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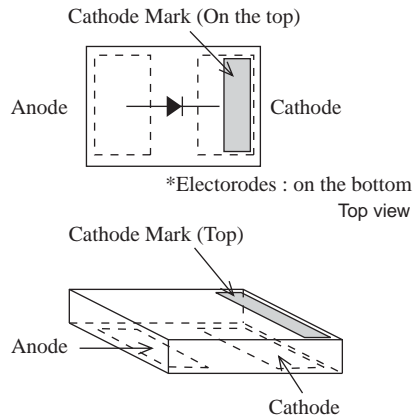
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Package Dimensions

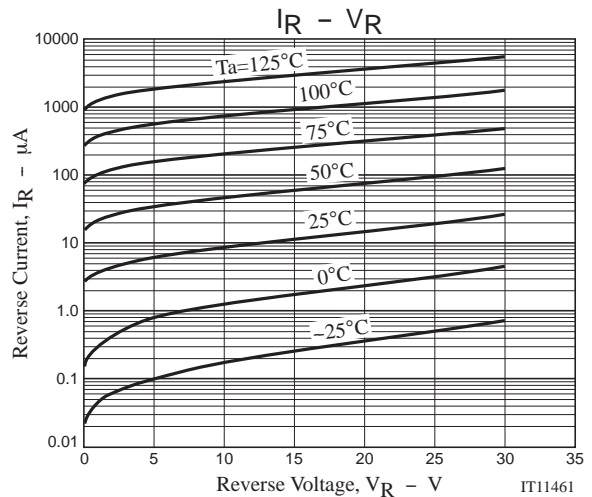
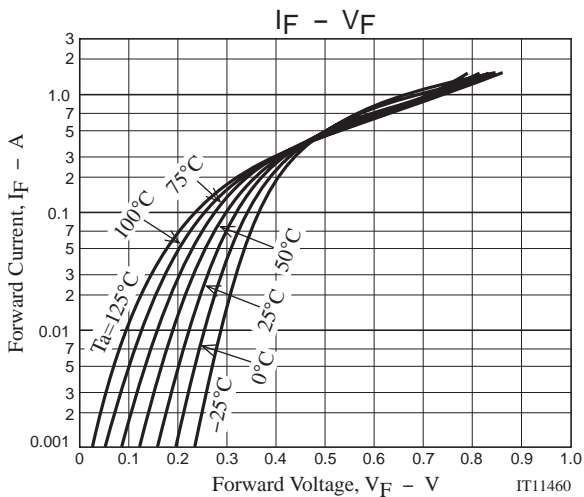
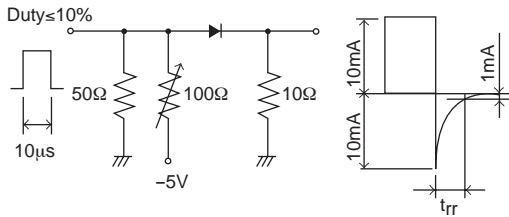
unit : mm (typ)
7035-002

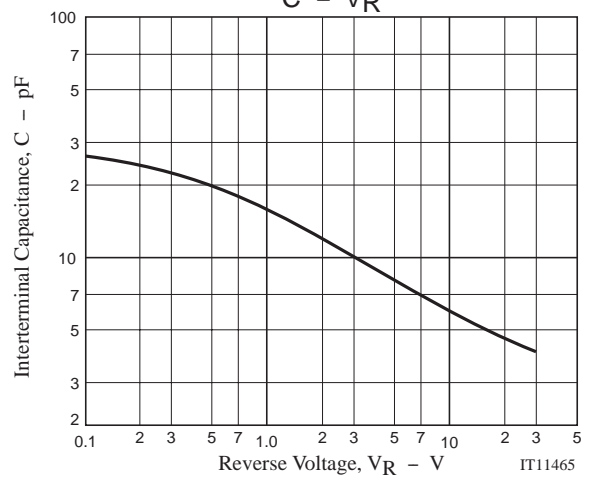
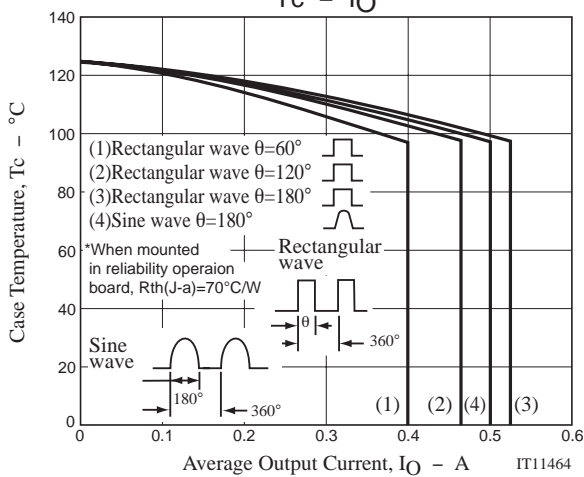
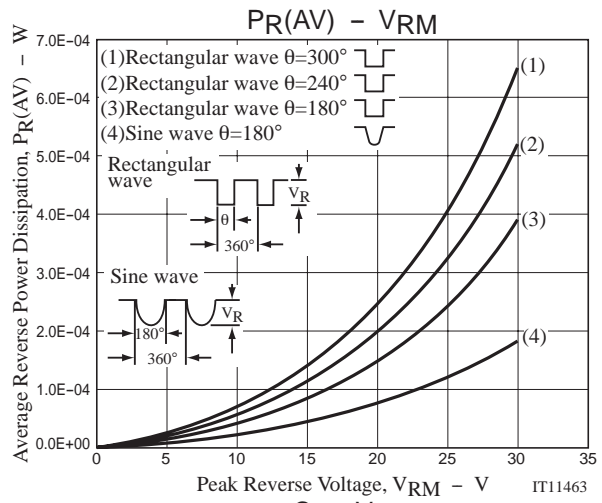
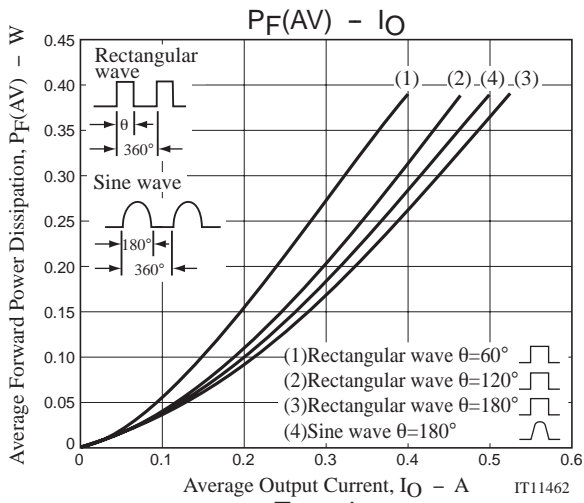


Electrical Connection



t_{rr} Test Circuit





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