



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

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°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	°C
Storage Temperature	T _{stg}		-55 to +125	°C

Electrical Characteristics at T_a=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V _R	I _R =0.2mA	30			V
Forward Voltage	V _{F1}	I _F =0.1A		0.31	0.36	V
	V _{F2}	I _F =0.5A		0.51	0.56	V
Reverse Current	I _R	V _R =15V			100	μA
Interterminal Capacitance	C	V _R =10V, f=1MHz		6		pF
Reverse Recovery Time	t _{rr}	I _F =I _R =100mA, See specified Test Circuit.			10	ns
Thermal Resistance	R _{th(j-a)}	Mounted in Cu-foiled area of 0.72mm ² ×0.03mm on glass epoxy board		70		°C / W

Marking : DB

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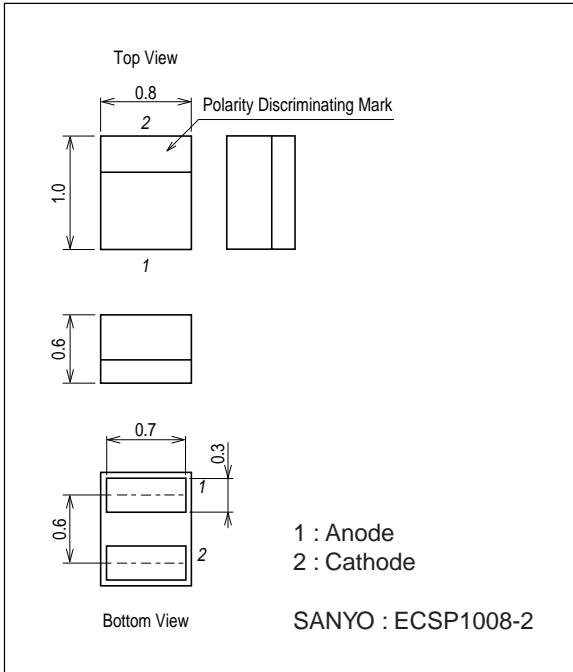
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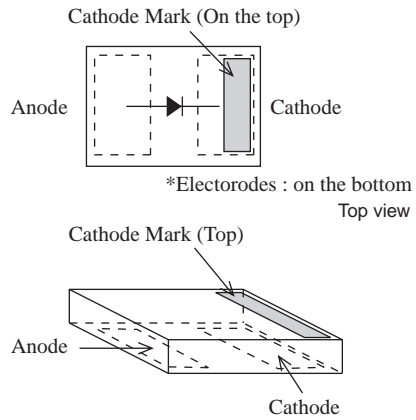
SS0503EC

Package Dimensions

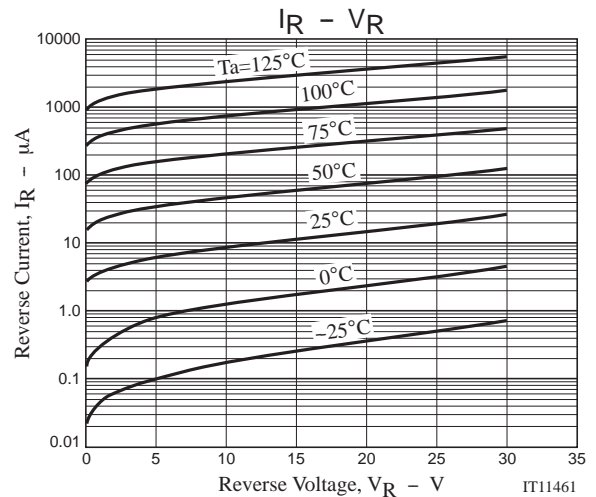
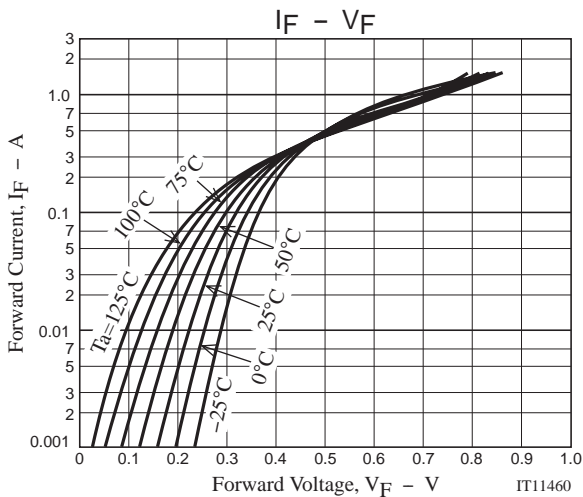
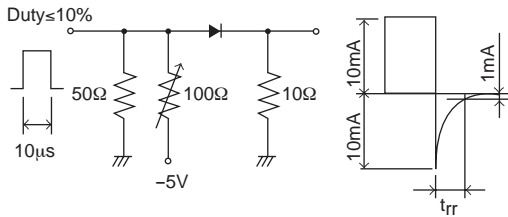
unit : mm (typ)
7035-002

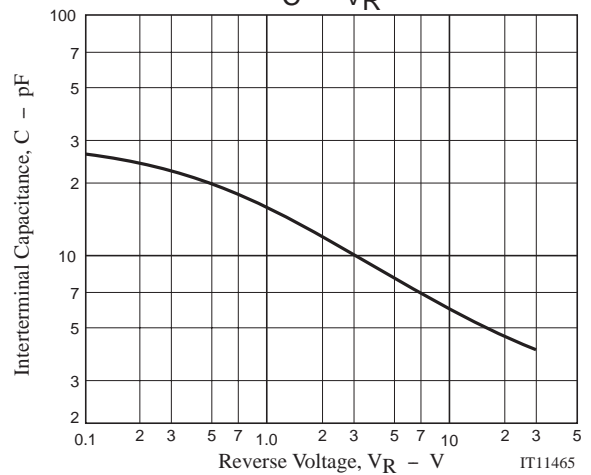
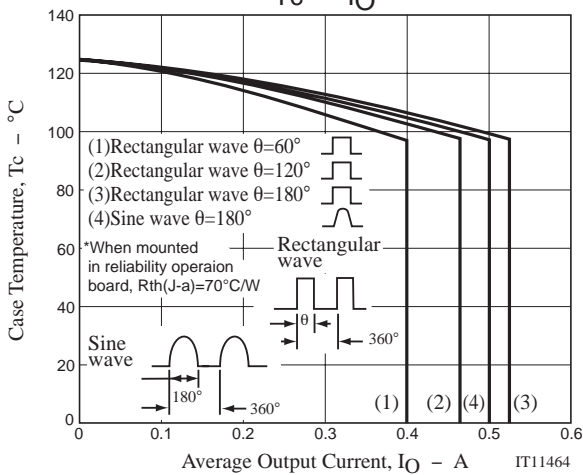
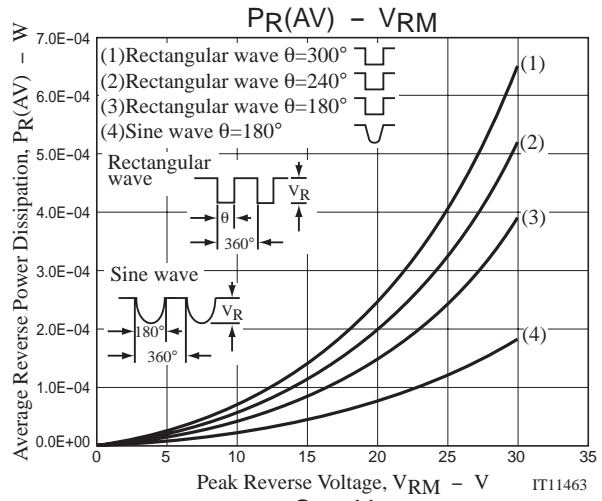
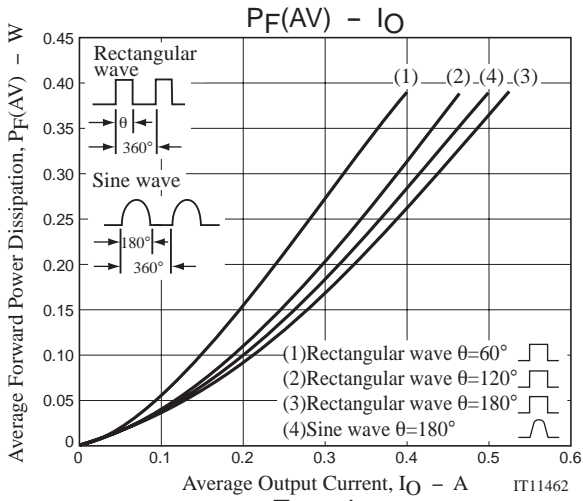


Electrical Connection



t_{rr} Test Circuit





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