

SANYO Semiconductors DATA SHEET



Schottky Barrier Diode (Twin Type • Cathode Common) 50V, 100mA Rectifier

Applications

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

Features

- Low forward voltage (V_F max=0.55V).
- Fast reverse recorvery time (t_{rr} max=10ns).
- Low switching noise.
- · Low leakage current and high reliability due to highly reliable planar structure.

Specifications

Absolute Maximum Ratings at Ta=25°C (Value per element)

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		50	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		55	V
Average Output Current	lO		100	mA
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	2	А
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

Electrical Characteristics at Ta=25°C (Value per element)

Symbol	Conditions	Ratings			Unit
Symbol		min	typ	max	Unit
VR	IR=50μA	50			V
VF	IF=100mA			0.55	V
IR	V _R =25V			15	μΑ
С	VR=10V, f=1MHz		4.4		pF
	VF	VR IR=50μA VF IF=100mA IR VR=25V	VR IR=50μA 50 VF IF=100mA 10 IR VR=25V 10	Symbol Conditions min typ VR IR=50μA 50 50 VF IF=100mA 10 10 IR VR=25V 10 10	Symbol Conditions min typ max VR IR=50μA 50 VF IF=100mA 0.55 15 IR VR=25V 15 15

Marking : M

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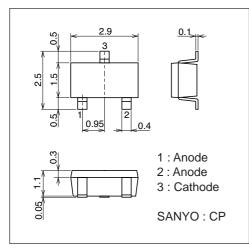
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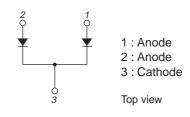
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Recovery Time	trr	IF=IR=10mA, See specified Test Circuit.			10	ns
Thermal Resistance	Rth(j-a)1			560		°C / W
	Rth(j-a)2	Mounted on Cu-foild area of 16mm ² ×0.2mm		410		°C / W
		on glass epoxy board				

Package Dimensions

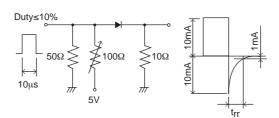
unit : mm (typ) 7013A-006

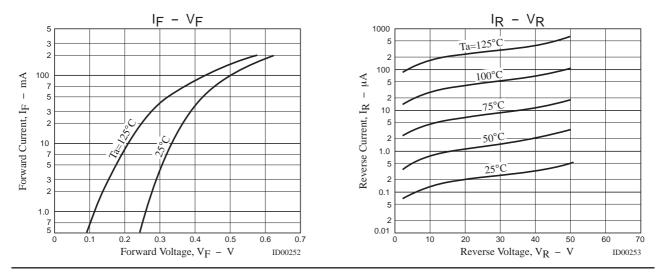


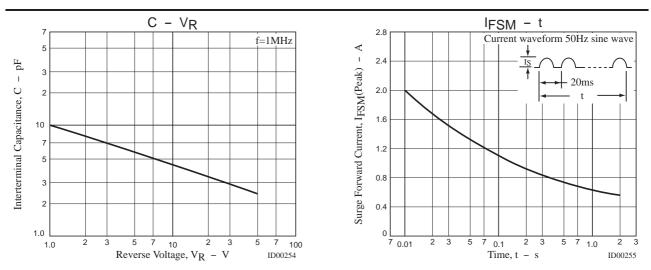
Electrical Connection



trr Test Circuit







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