



SANYO Semiconductors

DATA SHEET

SBE601 — Schottky Barrier Diode (Twin Type • Cathode Common) 30V, 2A Rectifier

Applications

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

Features

- Low forward voltage (V_F max=0.60V).
- Fast reverse recovery time (t_{rr} max=20ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

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}		35	V
Average Output Current	I_O		2	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	20	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	$I_R=500\mu\text{A}$	30			V
Forward Voltage	V_F	$I_F=2\text{A}$			0.60	V
Reverse Current	I_R	$V_R=15\text{V}$			100	μA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		67		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 on a ceramic board (600mm ² X0.8mm)		110		$^\circ\text{C/W}$

Marking : SE

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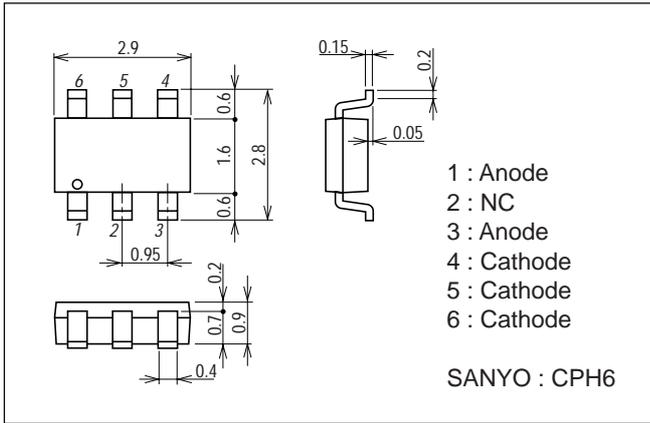
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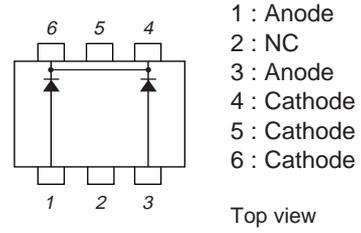
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

Package Dimensions

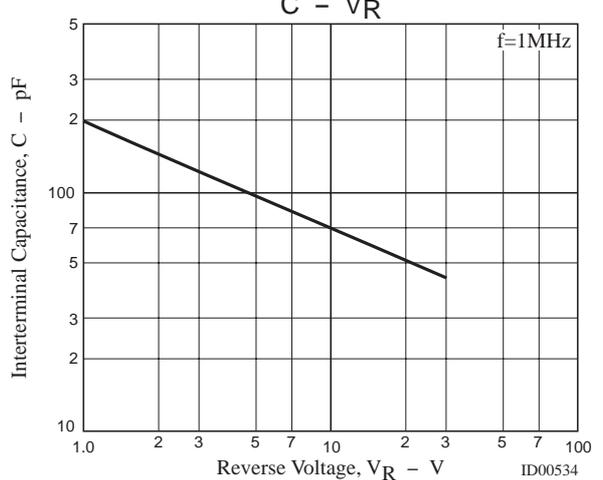
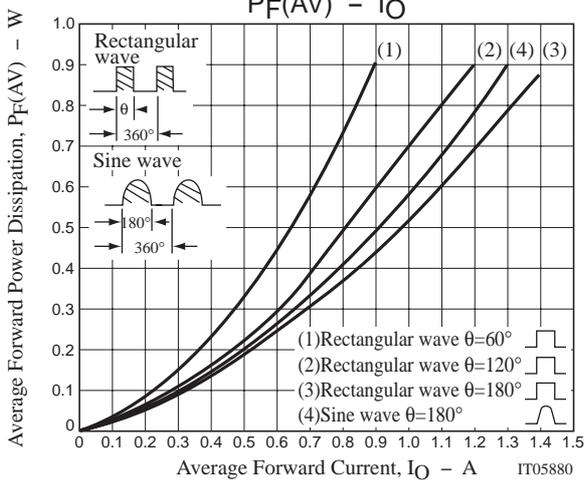
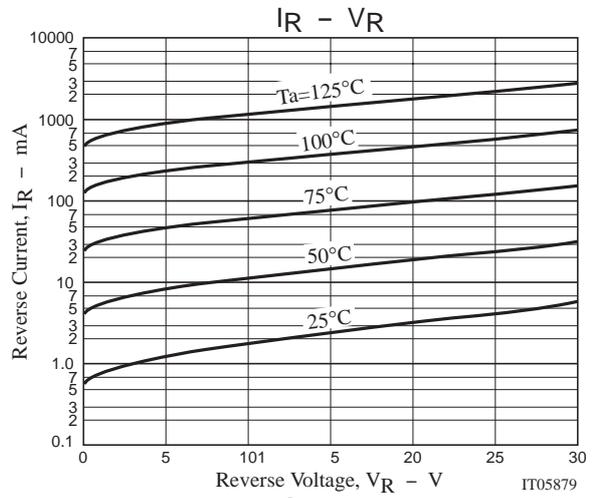
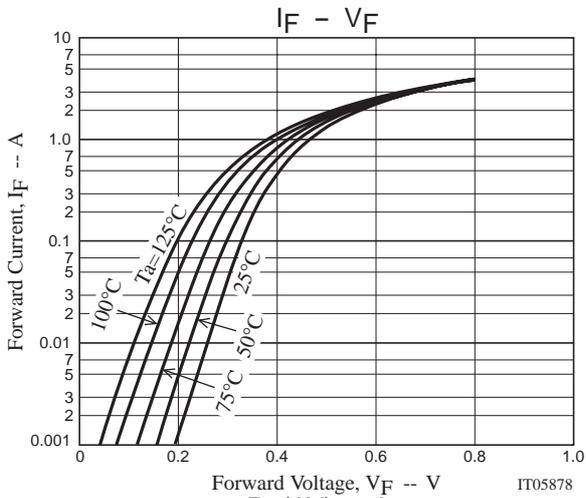
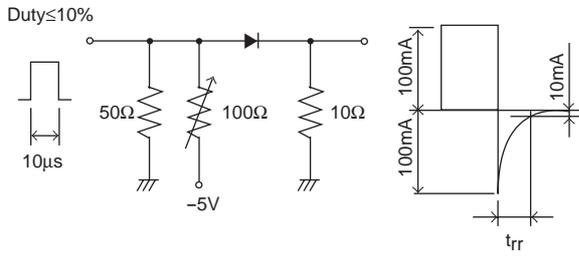
unit : mm
1328

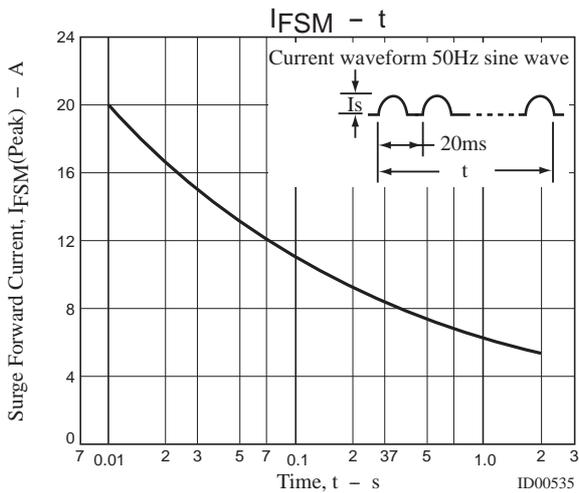


Electrical Connection



t_{rr} Test Circuit





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