

SANYO**SB40-03T**

Schottky Barrier Diode

30V, 4A Rectifier**Applications**

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

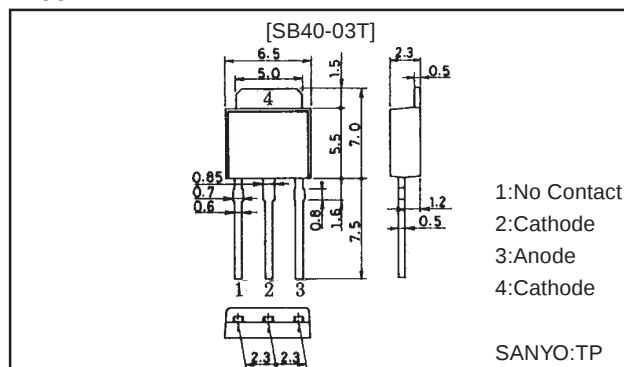
Features

- Low forward voltage (V_F max=0.55V).
- Fast reverse recovery time (t_{rr} max=30ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

Package Dimensions

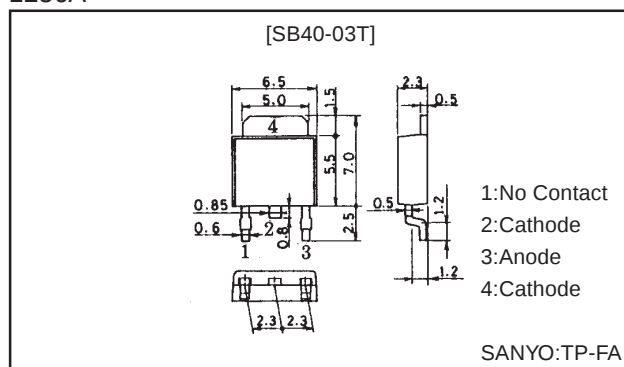
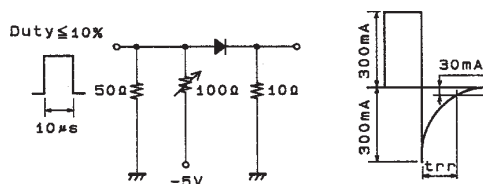
unit:mm

1255A



unit:mm

1256A

 **t_{rr} Test Circuit****Specifications****Absolute Maximum Ratings at $T_a = 25^\circ C$**

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	50Hz, resistive load, $T_c=105^\circ C$	4	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	40	A
Junction Temperature	T_j		-55 to +125	$^\circ C$
Storage Temperature	T_{stg}		-55 to +125	$^\circ C$

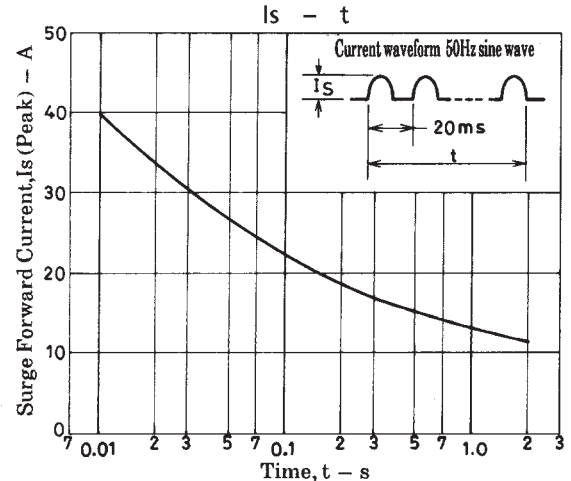
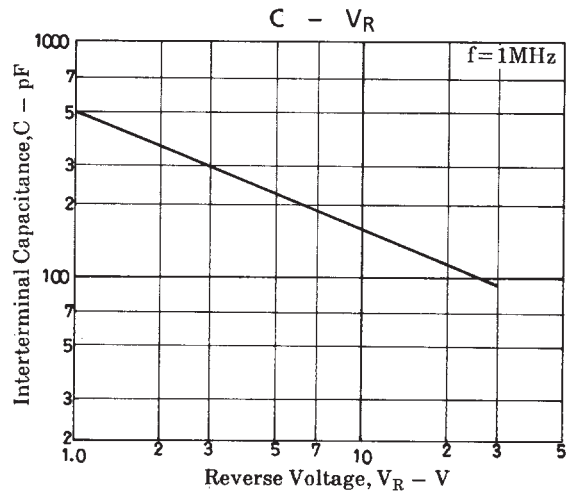
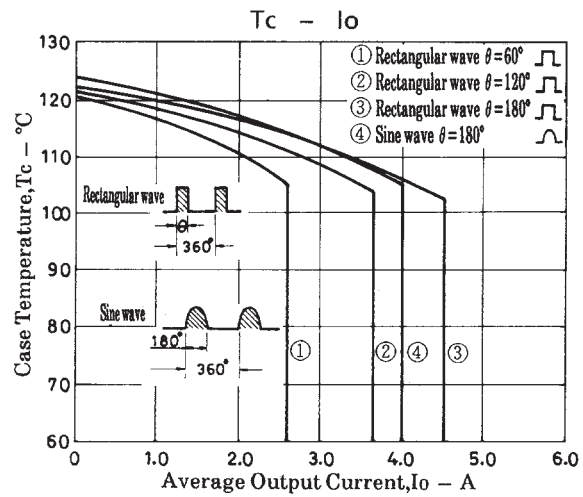
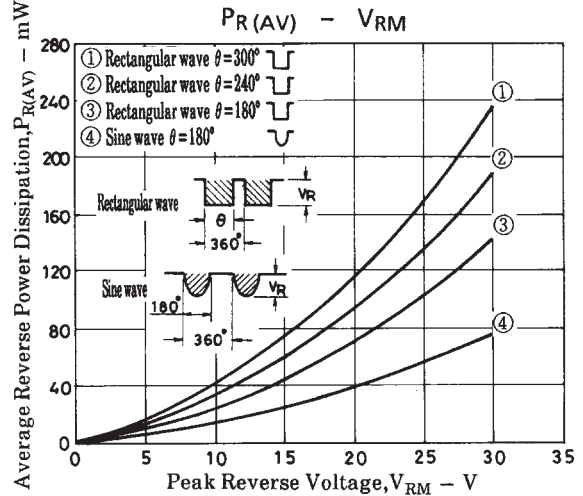
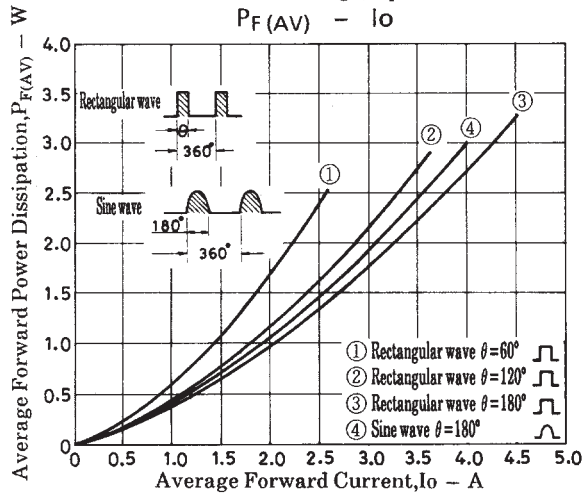
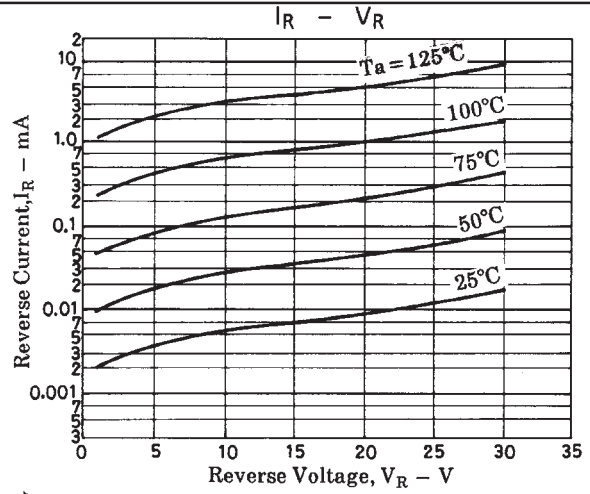
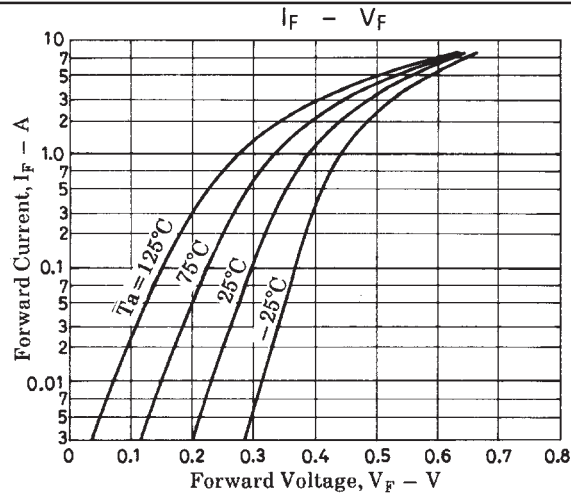
Electrical Characteristics at $T_a = 25^\circ C$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=1mA$	30			V
Forward Voltage	$V_F(1)$	$I_F=4A$			0.55	V
	$V_F(2)$	$I_F=1A$			0.45	V
Reverse Current	I_R	$V_R=15V$			200	μA
Interterminal Capacitance	C	$V_R=10V, f=1MHz$		160		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=300mA$, See specified Test Circuit			30	ns
Thermal Resistance (Junction-Ambient)	$R_{th(j-a)}$			90		$^\circ C/W$
Thermal Resistance (Junction-Case)	$R_{th(j-c)}$			6		$^\circ C/W$

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