Ordering number:EN2830B

SB100-09K

Schottky Barrier Diode (Twin Type · Cathode Common)

90V, 10A Rectifier

Applications

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

Features

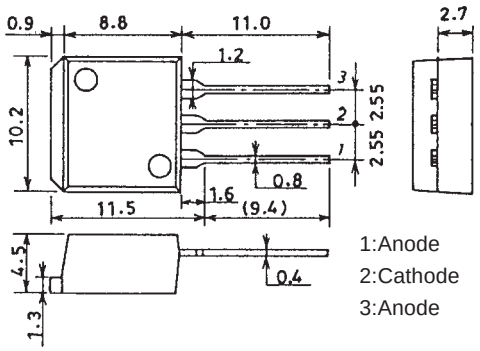
· Low forward voltage (V_F max=0.85V).
· Fast reverse recovery time (trr max=45ns).
· Low switching noise.
· Low leakage current and high reliability due to highly reliable planar structure.

Package Dimensions

unit:mm

1199C

[SB100-09K]



SANYO:TO-220MF

Specifications

Absolute Maximum Ratings at Ta = 25˚C

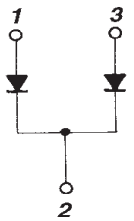
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		90	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		95	V
Average Output Current	I_O	50Hz, resistive load, Tc=92˚C	10	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	80	A
Junction Temperature	Tj		–55 to +125	˚C
Storage Temperature	Tstg		–55 to +125	˚C

Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	I_R=2mA, Tj=25˚C, *	90			V
Forward Voltage	V_F	I_F=4A, Tj=25˚C, *			0.85	V
Reverse Current	I_R	V_R=45V, Tj=25˚C, *			0.4	mA
Reverse Recovery Time	trr	I_F=2mA, Tj=25˚C, *, –dI_F/dt=10A/μs			45	ns
Thermal Resistance	Rthj-c	Junction-Case:Smoothed DC			2.5	˚C/W

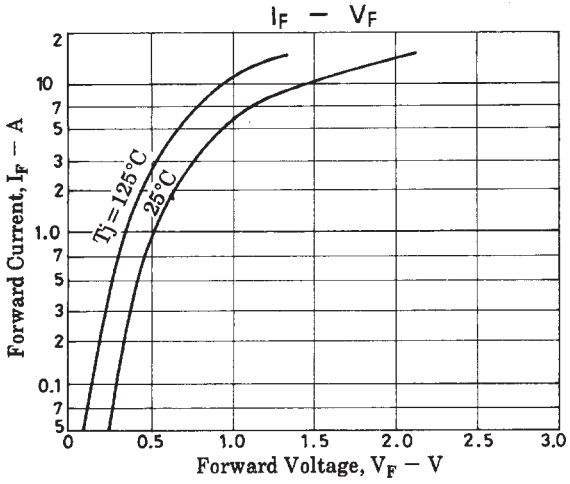
Note *:Value per element

Electrical Connection

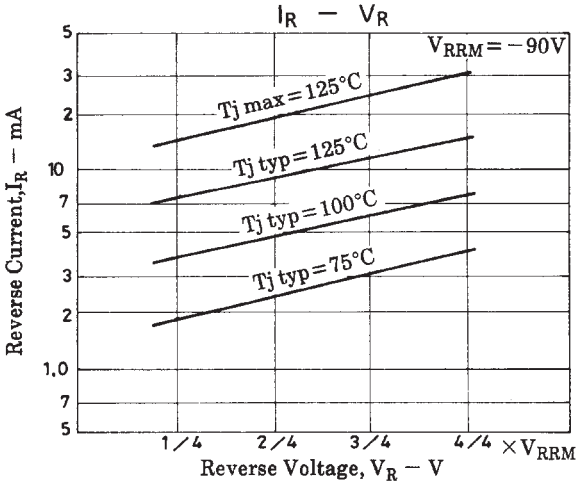


1:Anode
2:Cathode
3:Anode

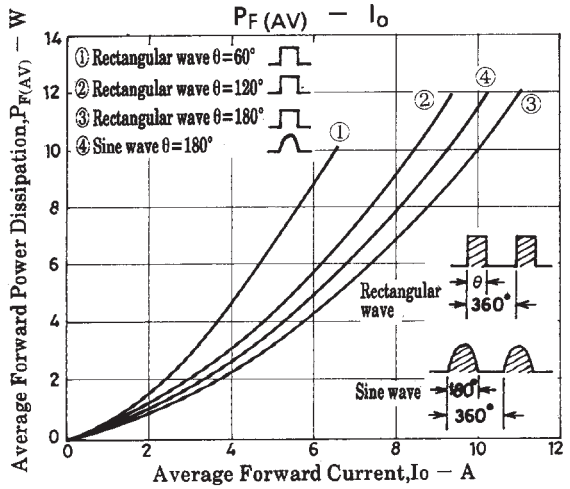
$I_F - V_F$



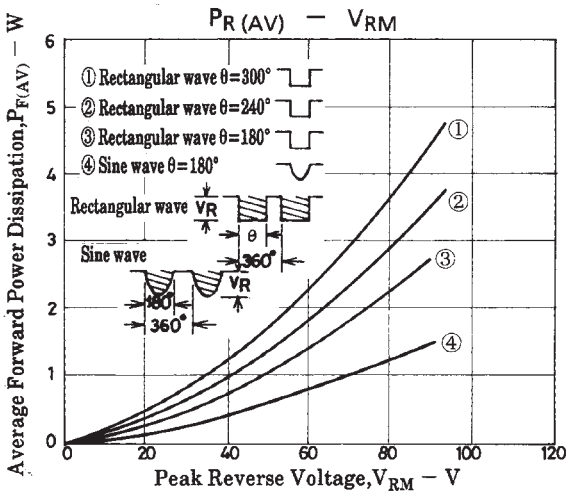
$I_R - V_R$



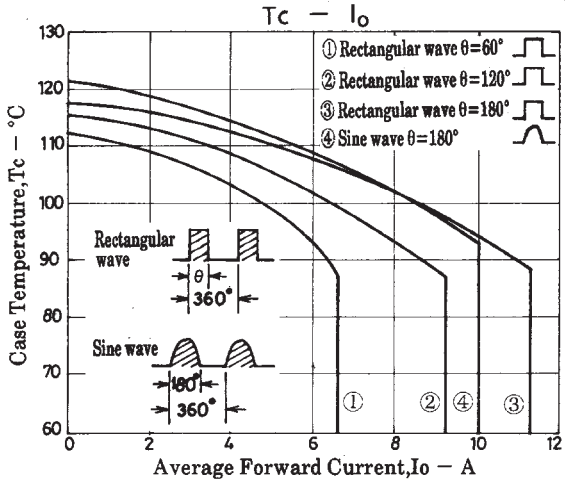
$P_{F(AV)} - I_O$



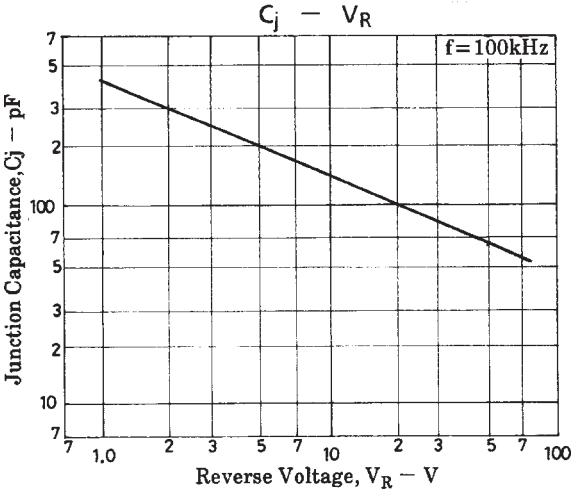
$P_{R(AV)} - V_{RM}$



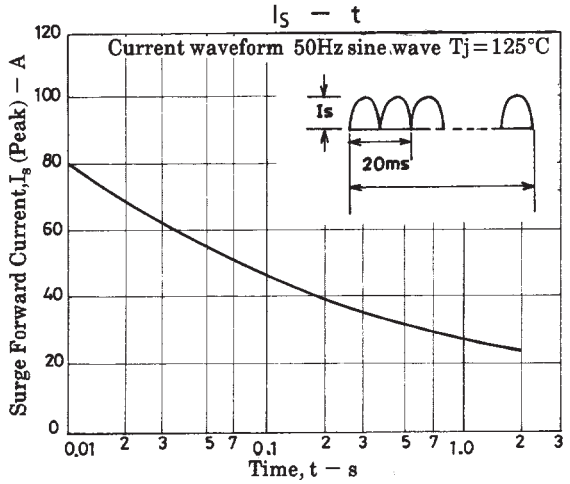
$T_C - I_O$



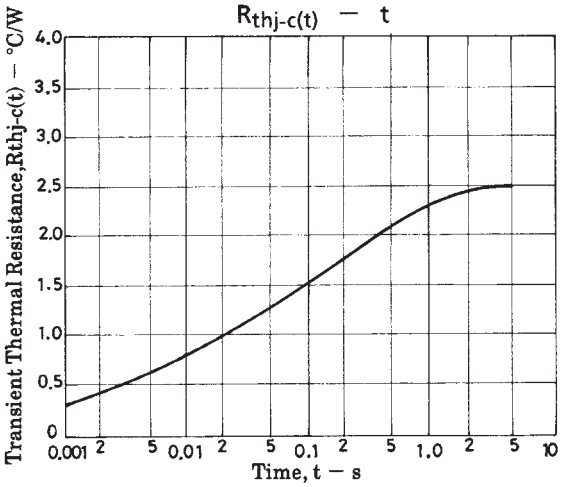
$C_j - V_R$



$I_S - t$



$R_{thj-c(t)} - t$



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