

D30XBN20

Bridge Diodes

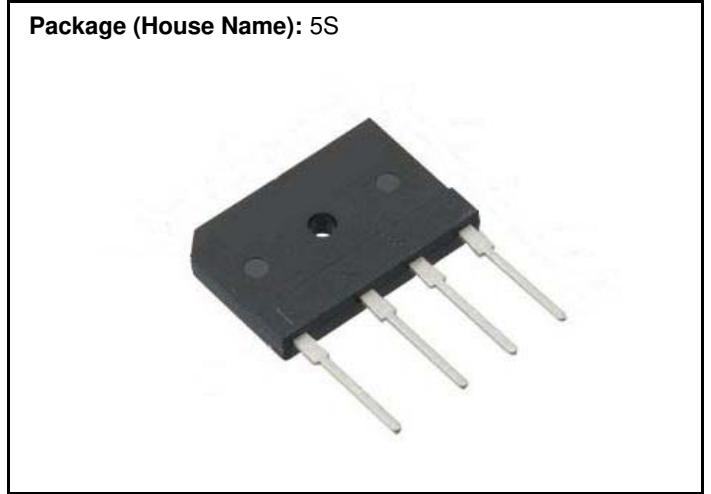
200V, 30A

Feature

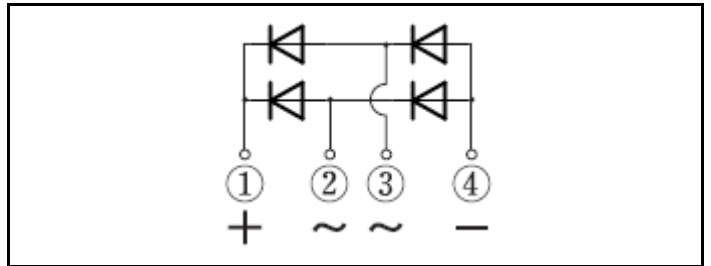
- Compact SIP
- SBD Bridge
- High Recovery Speed
- Low V_F
- Low I_R
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 5S



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : $T_C=25^{\circ}\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T_{stg}		-55 to 150	$^{\circ}\text{C}$
Junction temperature	T_j		150	$^{\circ}\text{C}$
Repetitive peak reverse voltage	V_{RRM}		200	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, With heatsink, $T_C=91^{\circ}\text{C}$	30	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, Without heatsink, $T_a=26^{\circ}\text{C}$	3.1	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^{\circ}\text{C}$	350	A
Dielectric strength	V_{dis}	Terminals to case, AC 1 minute	2.5	kV
Mounting torque	TOR	(Recommended torque : $0.5\text{N}\cdot\text{m}$)	0.8	$\text{N}\cdot\text{m}$

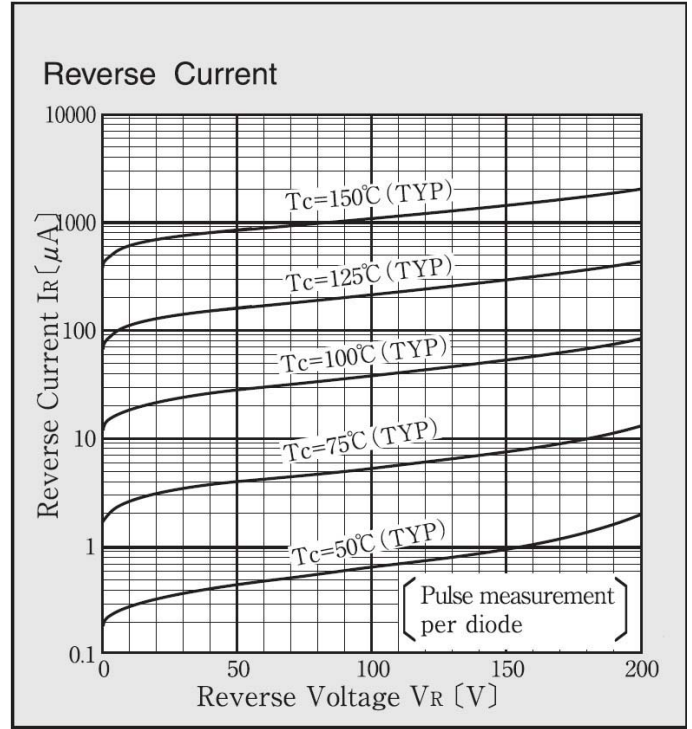
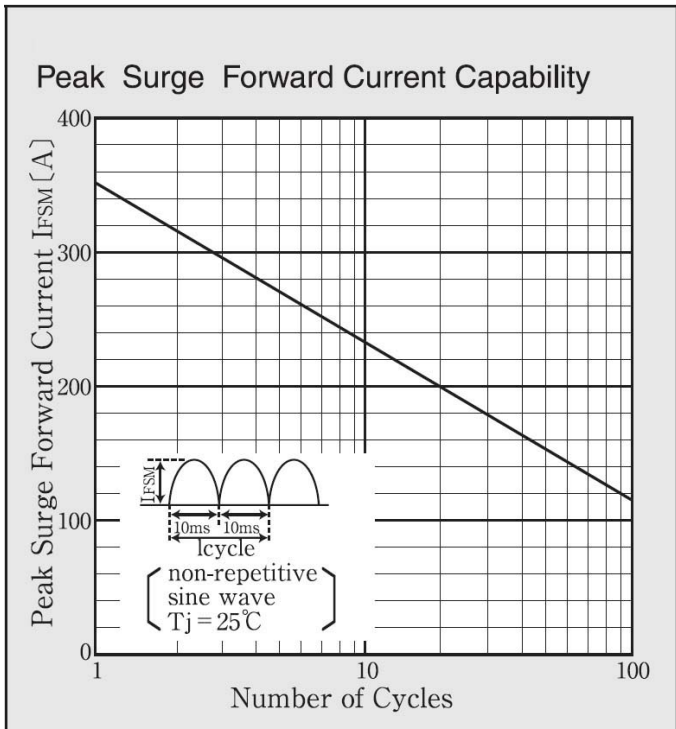
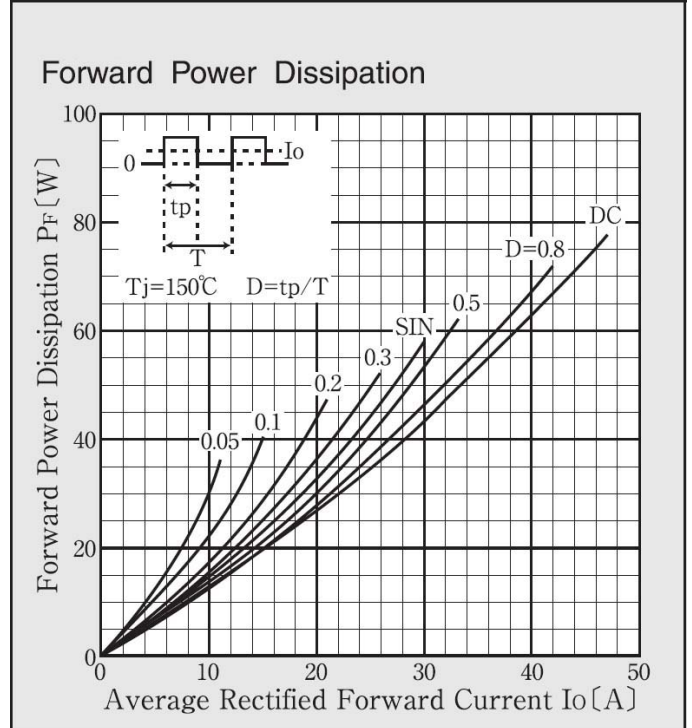
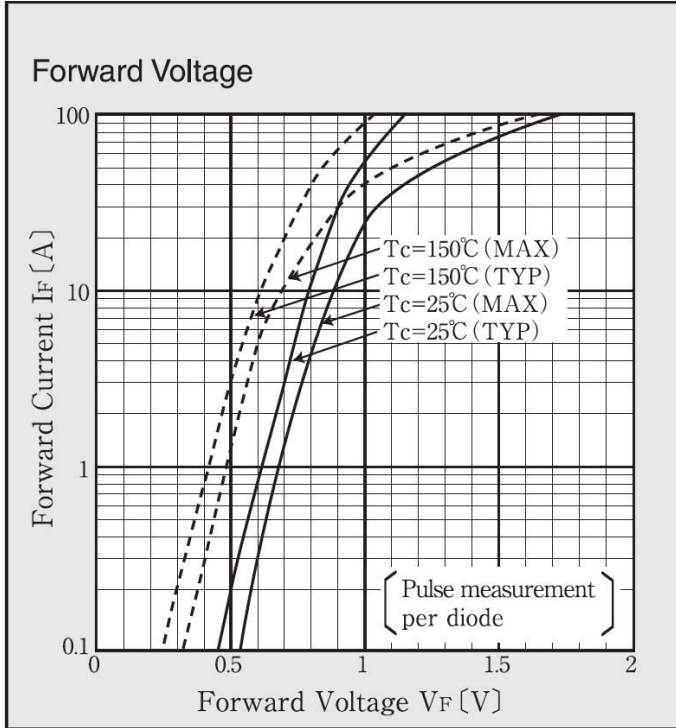
※ :See the original Specifications

Electrical Characteristics (unless otherwise specified : Tc=25°C)

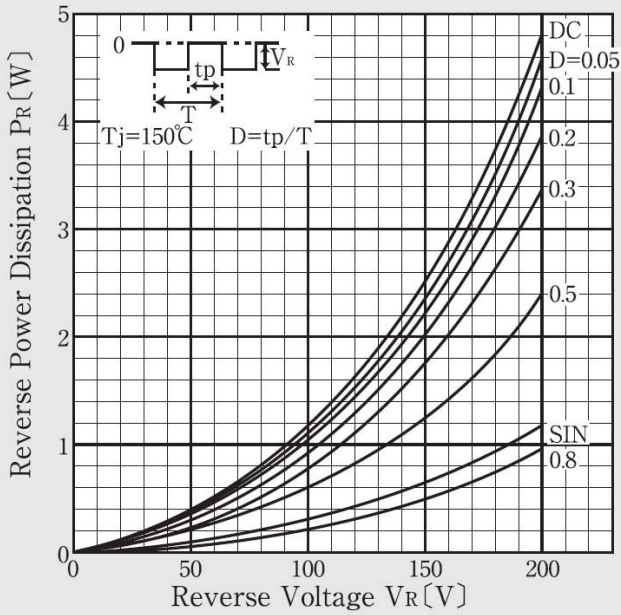
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =15A, Pulse measurement, per diode			0.9	V
Reverse current	I _R	V _R =200V, Pulse measurement, per diode			10	μA
Total capacitance	C _t	f=1MHz, V _R =10V, per diode		360		pF
Thermal resistance	R _{th(j-c)}	Junction to case, With heatsink			1	°C/W
Thermal resistance	R _{th(j-l)}	Junction to lead			5	°C/W
Thermal resistance	R _{th(j-a)}	Junction to ambient			25	°C/W

* :See the original Specifications

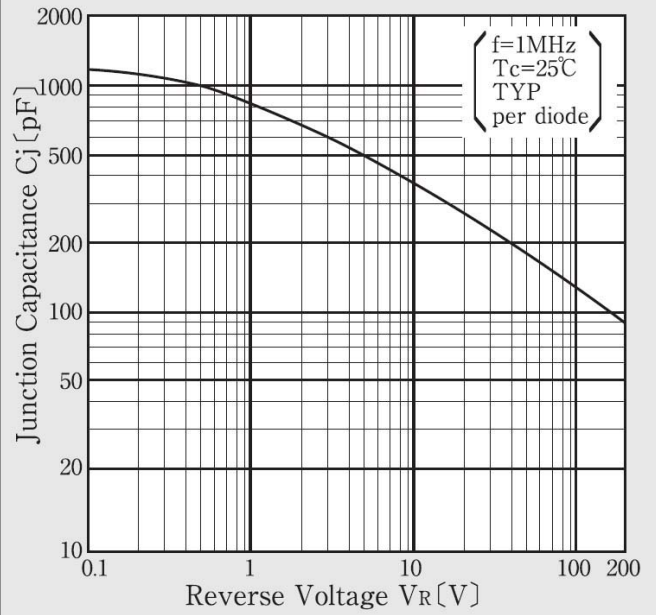
CHARACTERISTIC DIAGRAMS



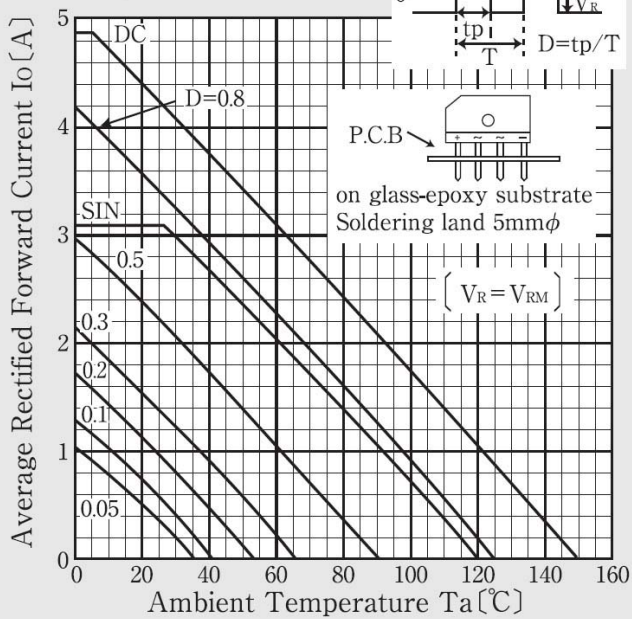
Reverse Power Dissipation



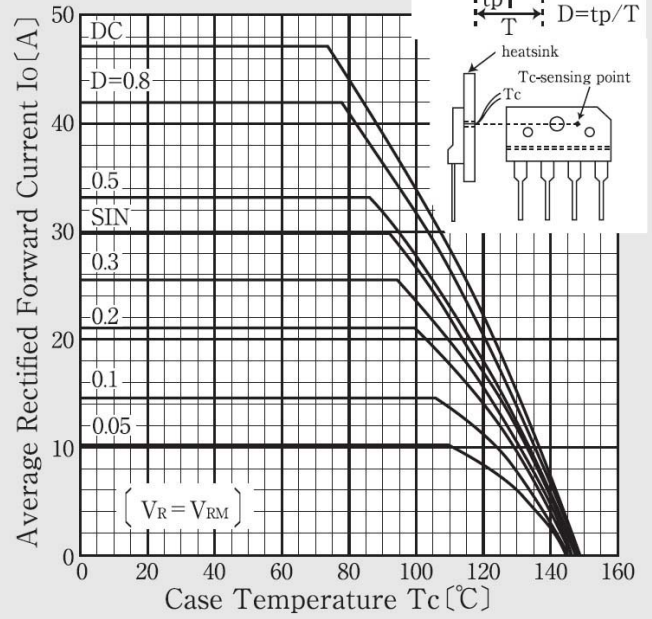
Junction Capacitance



Derating Curve



Derating Curve



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