

D10SBS4

Bridge Diodes

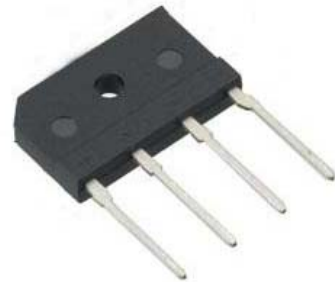
40V, 10A

Feature

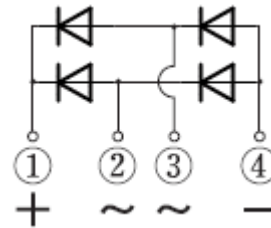
- Compact SIP
- SBD Bridge
- High Recovery Speed
- Low V_F
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 3S



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}		40	V
Non-repetitive peak reverse voltage	V_{RSM}	Pulse width 0.5ms, Duty 1/40	45	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, With heatsink, $T_c=67^\circ\text{C}$	10	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, Without heatsink, $T_a=25^\circ\text{C}$	3.4	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	100	A
Repetitive peak surge reverse power	P_{RRSM}	Pulse width 10 μs , per diode, $T_j=25^\circ\text{C}$	330	W
Dielectric strength	V_{dis}	Terminals to case, AC 1 minute	2	kV
Mounting torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

* : See the original Specifications

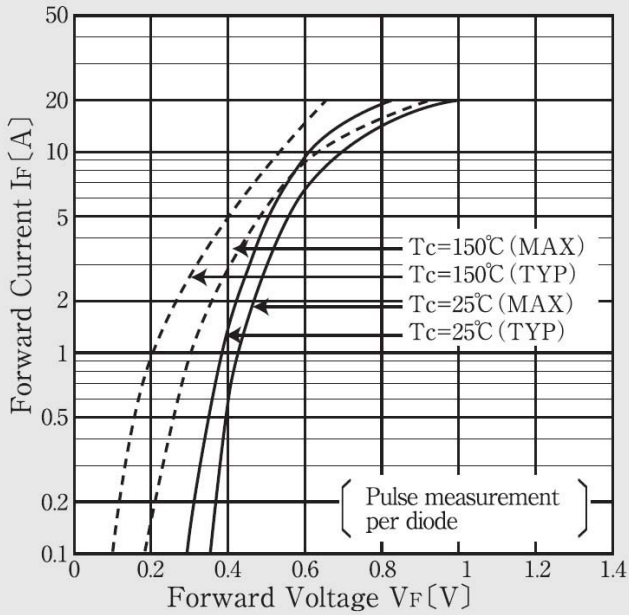
Electrical Characteristics (unless otherwise specified : T_c=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =5A, Pulse measurement, per diode			0.55	V
Reverse current	I _R	V _R =40V, Pulse measurement, per diode			3500	μA
Total capacitance	C _t	f=1MHz, V _R =10V, per diode		180		pF
Thermal resistance	R _{th(j-c)}	Junction to case, With heatsink			5.5	°C/W
Thermal resistance	R _{th(j-l)}	Junction to lead, Without heatsink			6	°C/W
Thermal resistance	R _{th(j-a)}	Junction to ambient, Without heatsink			30	°C/W

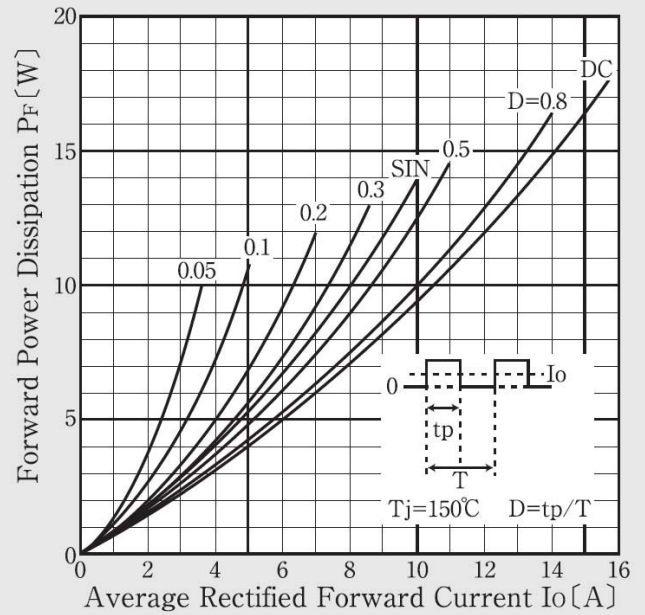
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

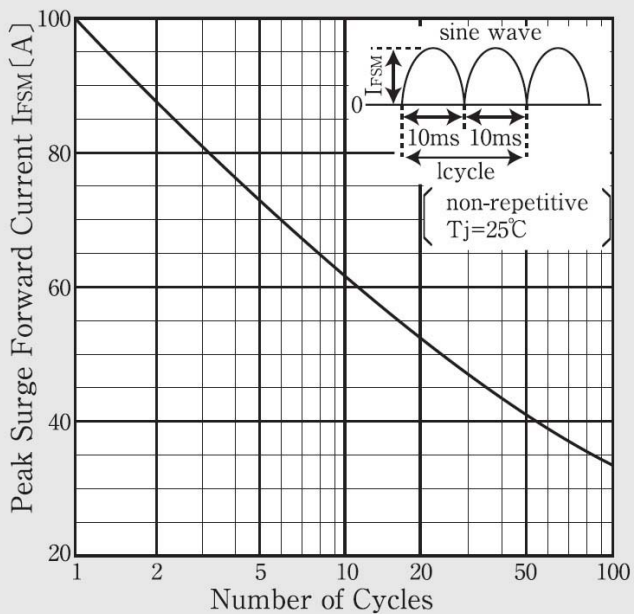
Forward Voltage



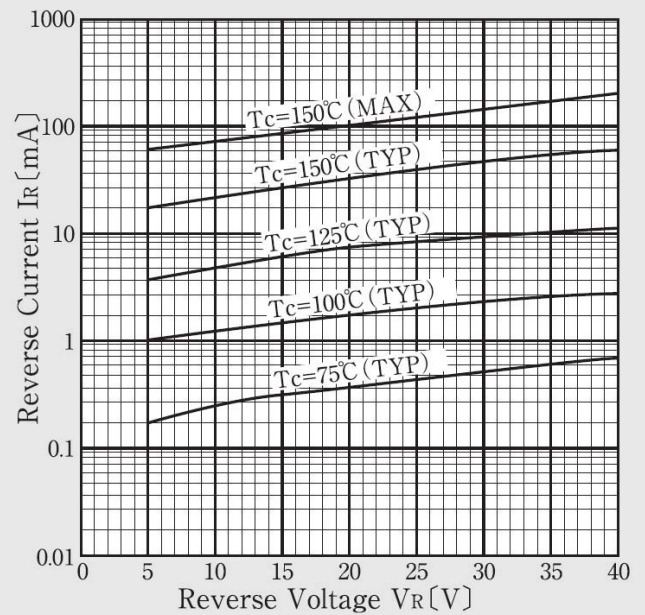
Forward Power Dissipation



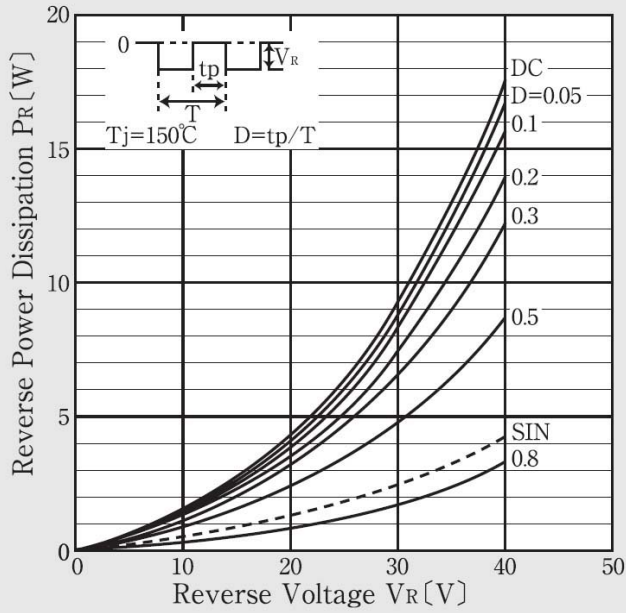
Peak Surge Forward Current Capability



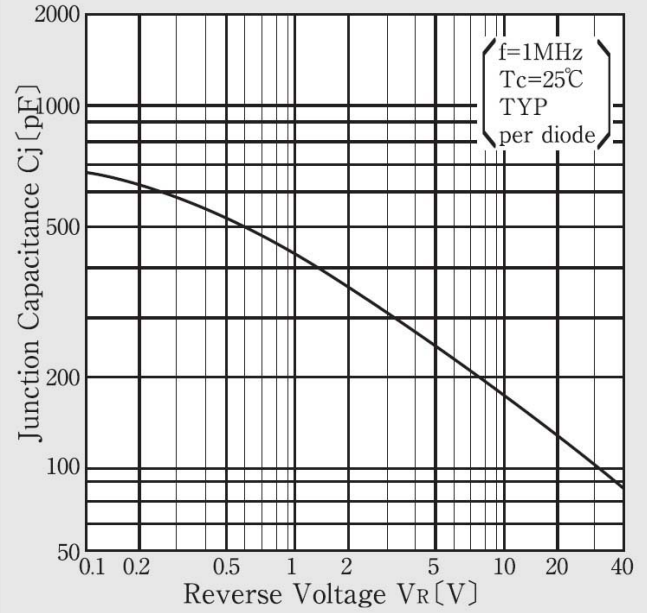
Reverse Current



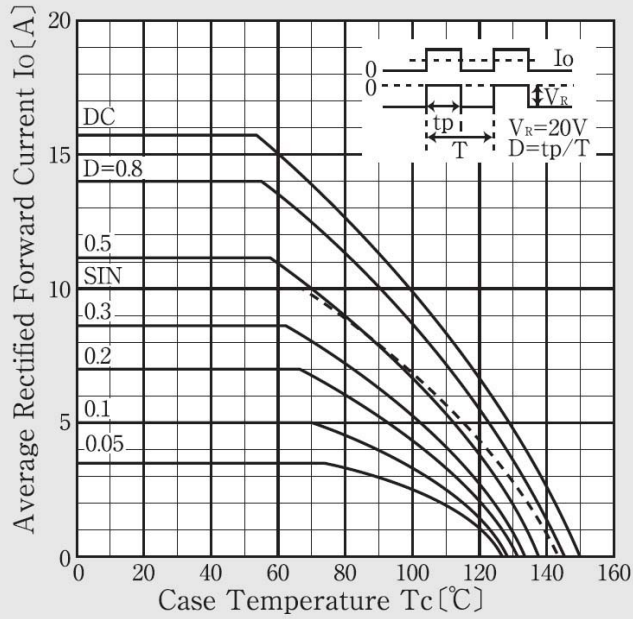
Reverse Power Dissipation



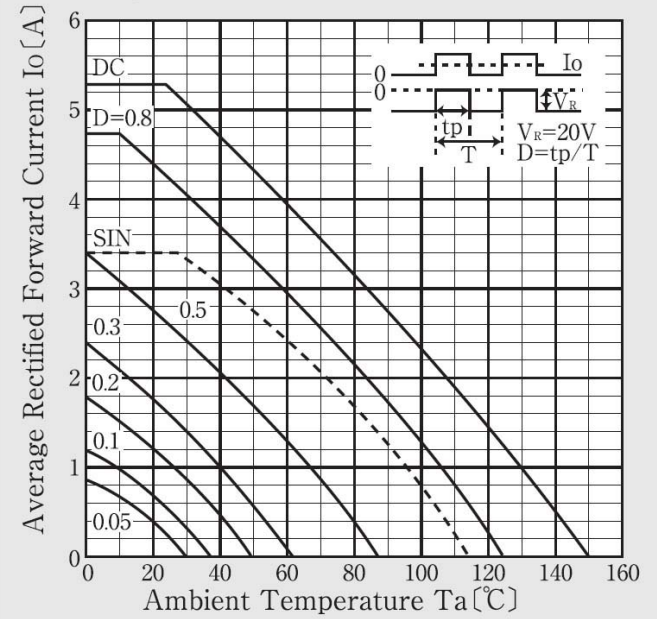
Junction Capacitance



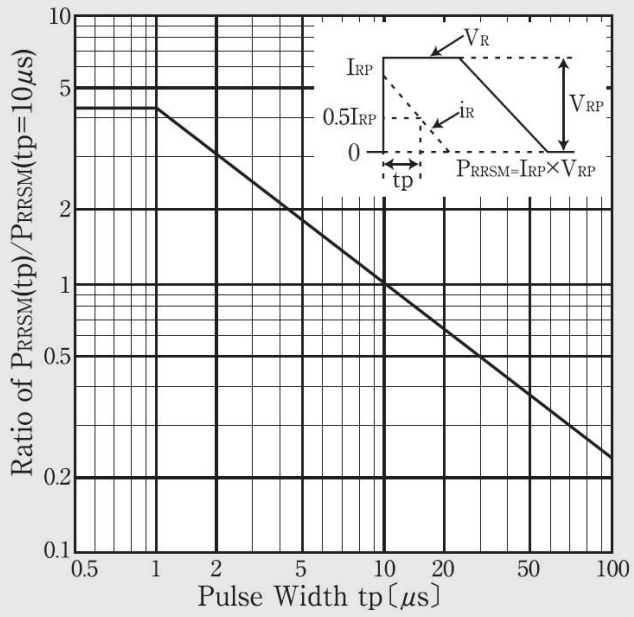
Derating Curve



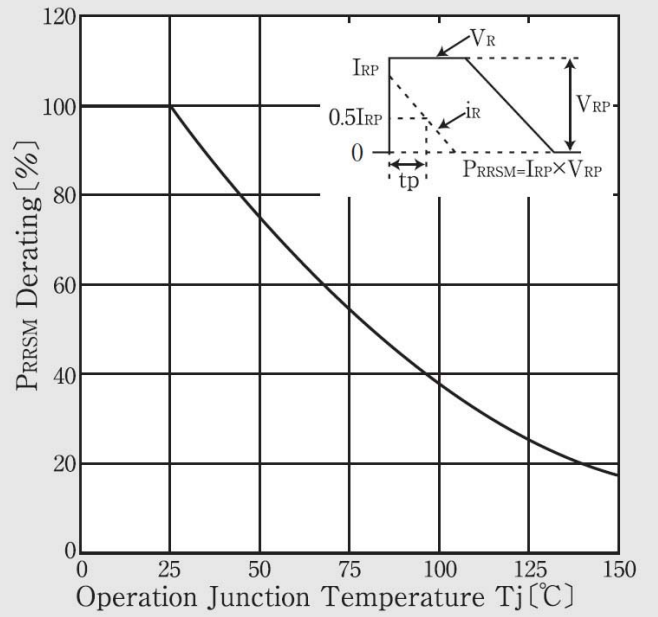
Derating Curve



Repetitive Surge Reverse Power Capability

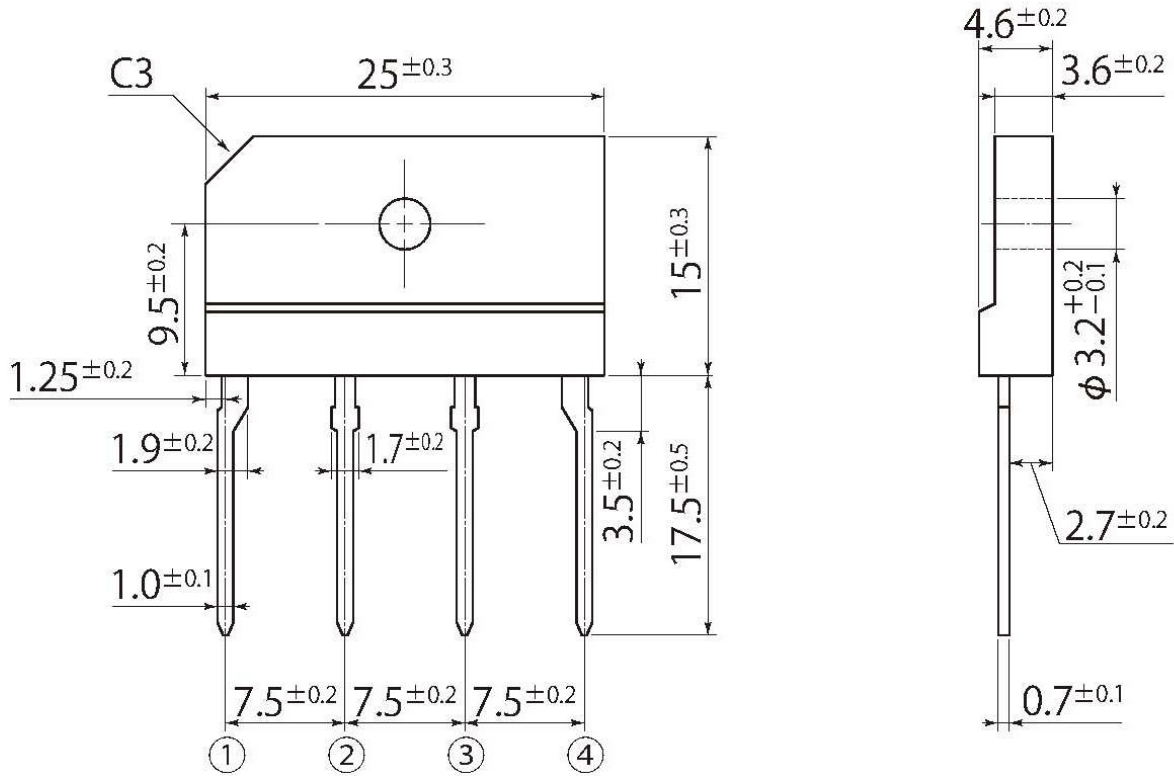


Repetitive Surge Reverse Power Derating Curve



D3

JEDEC Code	-
JEITA Code	-
House Name	3S



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