DF005S_10S

PRV : 50 - 1000 Volts

Io : 1.5 Amperes

Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Fast switching for high efficiency
- RoHS compliant package

Mechanical Data

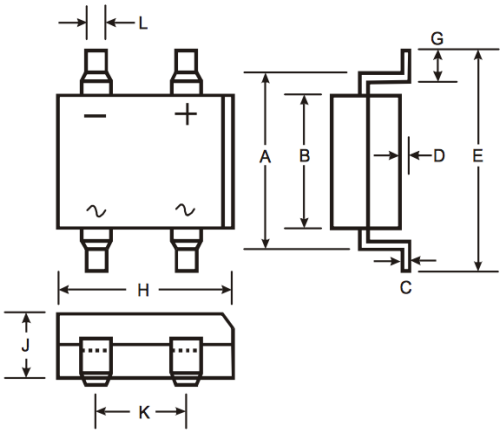
- Case : Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Terminals : Leads solderable per MIL-STD-202, method 208 guaranteed
- Mounting position : Any
- Weight : 0.02 ounce, 0.4 gram

Packing & Order Information

3,000/Reel

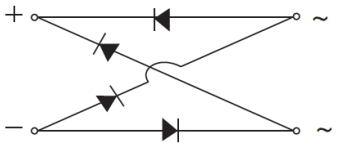


RoHS COMPLIANT



DF-S		
Dim	Min	Max
A	7.40	7.90
B	6.20	6.50
C	0.22	0.30
D	0.076	0.33
E	—	10.40
G	1.02	1.53
H	8.13	8.51
J	2.40	2.60
K	5.00	5.20
L	1.00	1.20
All Dimensions in mm		

Graphic symbol



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specifie.
Single phase, half wave, 60 Hz, resistive or inductive load
For capacitive load, derate current by 20%

Rating	Symbol	DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Rectified Current at Ta = 40 °C	$I_{F(AV)}$	1.0							A
Maximum Instantaneous Forward Voltage per element at IF = 1.0 A	V_F	1.1							V

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Single phase, half wave, 60 Hz, resistive or inductive load
For capacitive load, derate current by 20%

Rating	Symbol	GROA	GROB	GROD	GROG	GROJ	GROK	GROM	Unit
Maximum Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Current Squared Time at t < 8.3 ms	I^2t	10							A^2S
Maximum DC Reverse Current Ta = 25°C	I_R	10							μA
at Rated DC Blocking Voltage Ta = 100°C	$I_{R(H)}$	500							μA
Typical Junction capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							°C/W
Junction and storage temperature range	T_J,T_{STG}	-55 to +150							°C

NOTE:

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0VDC

(2) Thermal Resistance from Junction to Ambient on P.C.B. with 0.5" x 0.5" (13mm x 13mm) Copper Pads.

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■RATING AND CHARACTERISTIC CURVES (DF005S - DF10S)

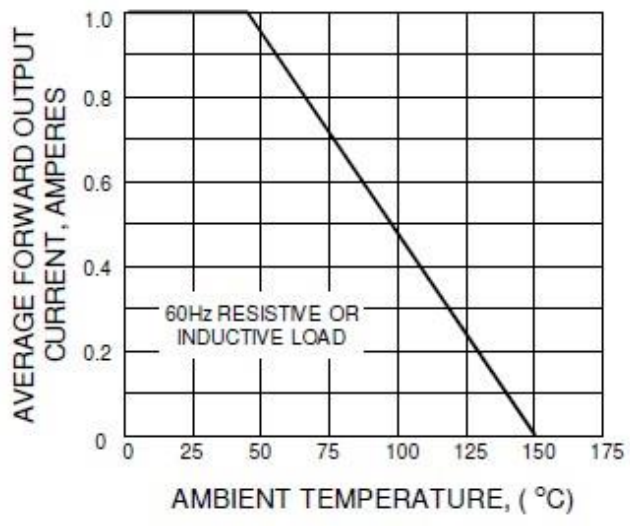


FIG.1 – DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

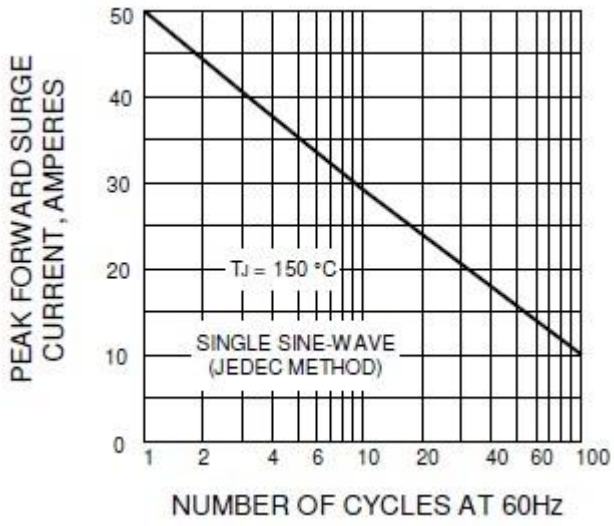


FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

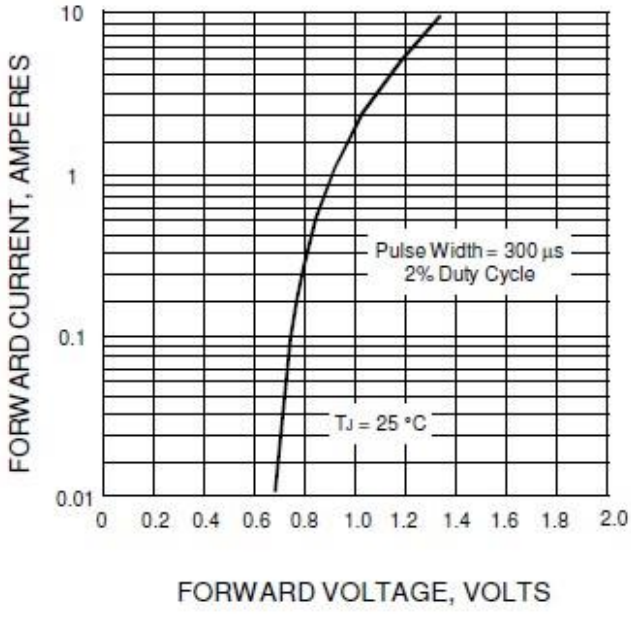


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

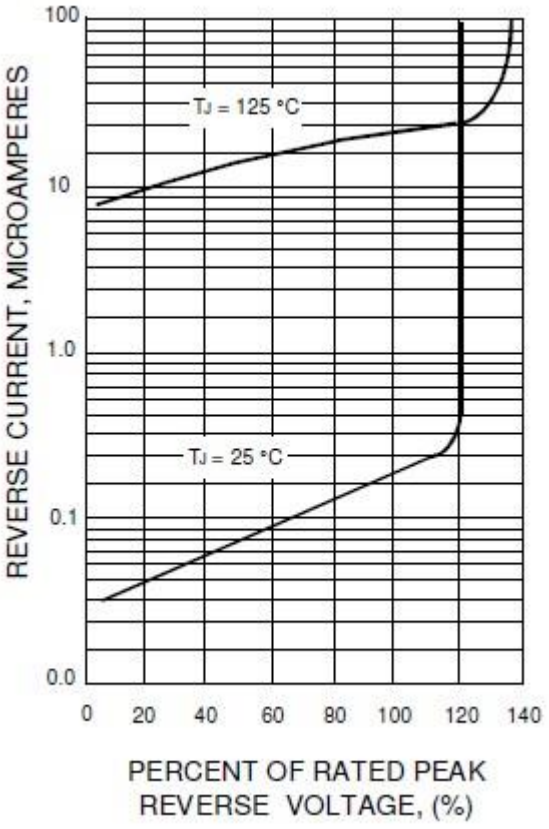


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

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