

# DF005S, DF01S, DF02S, DF04S, DF06S, DF08S, DF10S

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## Vishay General Semiconductor

<b>ELECTRICAL CHARACTERISTICS</b> (T <sub>A</sub> = 25 °C unless otherwise noted)										
PARAMETER	TEST CONDITIONS	SYMBOL	DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	UNIT
Maximum instantaneous forward voltage drop per diode	1.0 A	V <sub>F</sub>	1.1					V		
Maximum DC reverse current at	T <sub>A</sub> = 25 °C	I_	5.0						μA	
rated DC blocking voltage per diode	T <sub>A</sub> = 125 °C	I <sub>R</sub>	500							
Typical junction capacitance per diode (1)		CJ	25			pF				

#### Note

<sup>(1)</sup> Measured at 1.0 MHz and applied reverse voltage of 4.0 V

THERMAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise noted)									
PARAMETER	SYMBOL	YMBOL   DF005S   DF01S   DF02S   DF04S   DF06S   DF08S   DF16		DF10S	UNIT				
Typical thermal resistance (1)	$R_{\theta JA}$	40							
Typical thermal resistance (9)	$R_{\theta JL}$	15							

#### Note

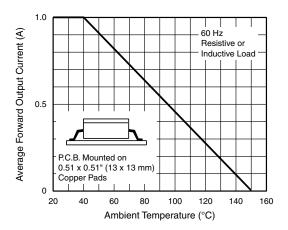
 $<sup>^{(1)}\,</sup>$  Units mounted on PCB with 0.51" x 0.51" (13 mm x 13 mm) copper pads

ORDERING INFORMATION (Example)								
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE				
DF06S-E3/45	0.399	45	50	Tube				
DF06S-E3/77	0.399	77	1500	13" diameter paper tape and reel				

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#### RATINGS AND CHARACTERISTICS CURVES (T<sub>A</sub> = 25 °C unless otherwise noted)



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Fig. 1 - Derating Curve Output Rectified Current

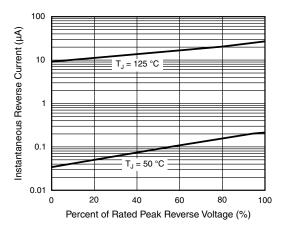


Fig. 4 - Typical Reverse Leakage Characteristics Per Diode

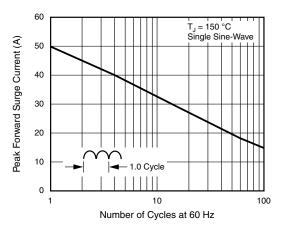


Fig. 2 - Maximum Non-Repetitive Peak Forward SurgeCurrent Per Diode

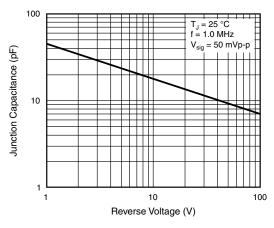


Fig. 5 - Typical Junction Capacitance Per Diode

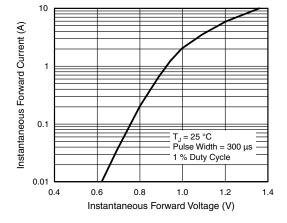


Fig. 3 - Typical Forward Characteristics Per Diode

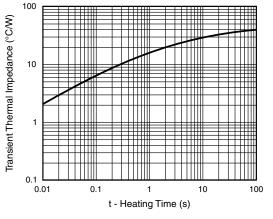


Fig. 6 - Typical Transient Thermal Impedance

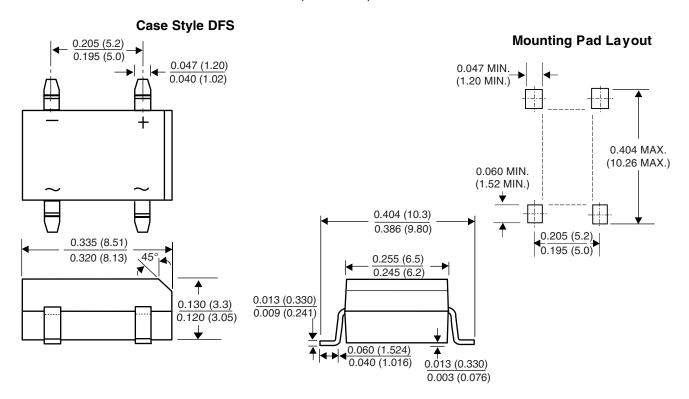


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#### **PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)

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