

SEMICONDUCTOR TECHNICAL DATA

DF06S

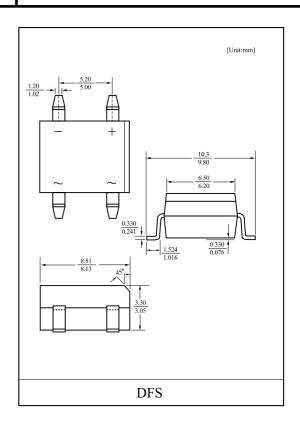
Single-Phase Bridge Rectifiers

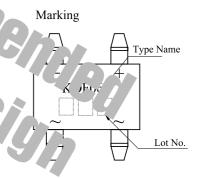
FEATURES

- Plastic package has Underwriters Laboratory flammability Classification 94V-0.
- · Glass passivated chip junction.
- · High surge overload rating: 50A peak.
- · Ideal for printed circuit boards.
- · High temperature soldering guaranteed
- : 260 /10 seconds, at 2.3kg tension.

MAXIMUM RATING (Ta=25)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive peak reverse voltage	V _{RRM}	600	V
RMS voltage	V _{RMS}	420	V
DC blocking voltage	y ,c	600	V
Average forward output rectified current at Ta=40		1	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load T _L =110	I _{FSM}	5	3
Rating for fusing (t<8.3ms)	I ² t	10	Assec
Operating Junction and Storage Temperature Range	Tj, Tstg		





ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERIST	TIC	SYMBOL	CONDITION	MIN	TYP	MAX	UNIT
Forward voltage		V_{F}	I _F =1A	-	-	1.1	V
Leakage current	Ta=25	I _R	V _R =600V	-	-	5	μA
	Ta=125			-	-	500	
Junction capacitance		C_{J}	V _R =4.0V, f=1MHz	-	25	-	pF
$ \begin{array}{c} R_{th}(A) \\ \text{(Note1)} \\ \hline \\ R_{th}(L) \\ \text{(Note1)} \end{array} $			Junction to ambient	-	-	40	/W
			Junction to lead	-	-	15	

Note 1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with (13 × 13mm) copper pads.

Fig.1 Derating Curve Output Rectified Current

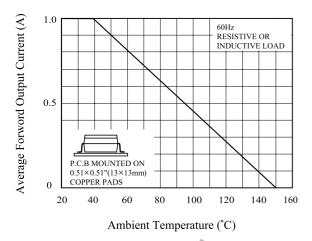


Fig.3 Typical Forward Caa this green Leg

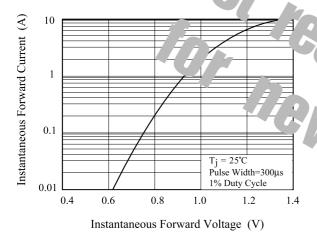


Fig.5 Typical Junction Capacitance Per Leg

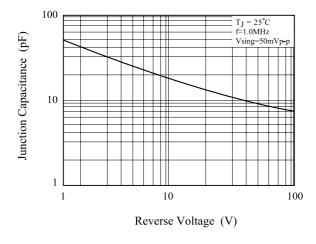
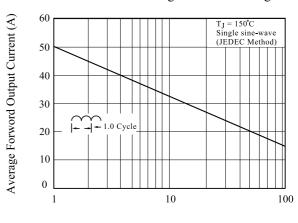


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current Per Leg



Number of Cycles at 60Hz

Fig.4 Typical Reverse Leakage Characteristics Per Leg

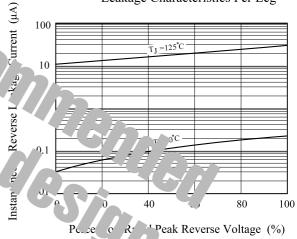


Fig.6 Typical Transient Thermal Impedance

