

SEMICONDUCTOR TECHNICAL DATA

DF06

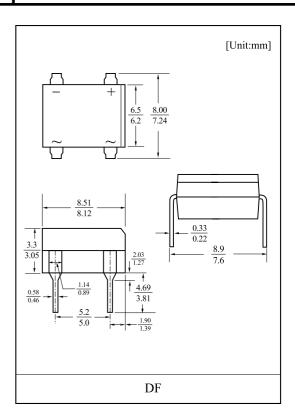
Single-Phase Bridge Rectifiers

FEATURES

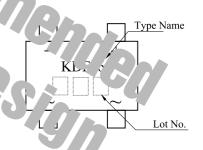
- Plastic package has Underwriters Laboratory flammability Classification 94V-0.
- · Glass passivated chip junction.
- · High surge overload rating: 50A peak.
- · Ideal for printed circuit boards.
- · High temperature soldering guaranteed
- : 260 /10 seconds, at 2.3kg tension.

MAXIMUM RATING (Ta=25)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Repetitive peak reverse voltage	V _{RRM}	600	V	
RMS voltage	V _{RMS}	V _{RMS} 420		
DC blocking voltage	V	600	V	
Average forward output rectified current at Ta=40	F(1	A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load T _L =110	I _{FSM}	50		
Rating for fusing (t<8.3ms)	A	10	A ² sec	
Operating Junction and Storage Temperature Range	Tj, Tstg	5. 5		



Marking



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=1.0MHz	-	25	-	pF
Thermal resistance		R _{th} (A) (Note1)	Junction to ambient	-	-	40	/W
		R _{th} (L) (Note1)	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

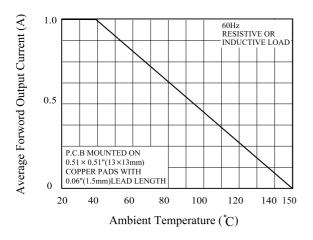


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current Per Leg

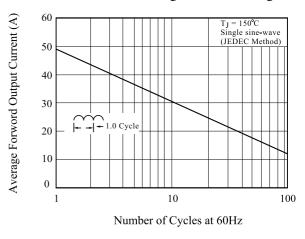


Fig.3 Typical Forward Characte istics Per Leg

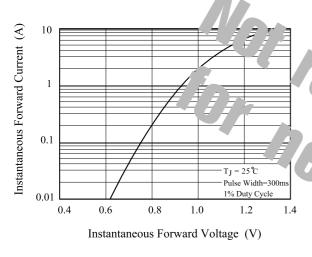


Fig.4 Typical Reverse
Leakage Characteristics Per Leg

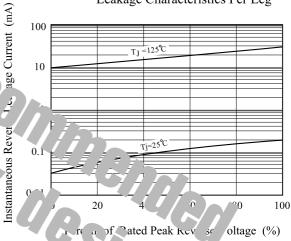


Fig.5 Typical Junction Capacitance Per Leg

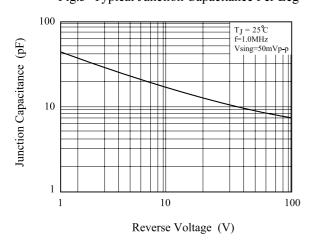


Fig.6 Typical Trancent Thermal Impedance

