

**SURFACE MOUNT  
GLASS PASSIVATED BRIDGE RECTIFIERS**

**REVERSE VOLTAGE – 400 to 1000 Volts  
FORWARD CURRENT – 1.0 Ampere**

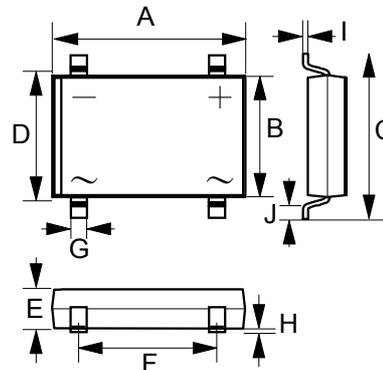
**FEATURES**

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop high current capability
- Reliable low cost construction utilizing molded plastic technique
- UL recognized file # E95060

**MECHANICAL DATA**

- Case Material: molding compound, UL flammability classification 94V-0
- Polarity: As marked on the body
- Mounting Position: Any
- Weight: 360mg (Approximate)

**DF-S**



DF-S		
DIM	MIN	MAX
A	8.20	8.50
B	6.20	6.50
C	9.80	10.30
D	7.40	7.90
E	2.40	2.60
F	5.00	5.20
G	1.00	--
H	.076	.330
I	.220	.300
J	1.02	1.53
All dimension in millimeter		

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

**ABSOLUTE RATINGS**

PARAMETER	SYMBOL	DF04SH	DF06SH	DF08SH	DF10SH	UNIT
Device marking code	Note	DF04SH	DF06SH	DF08SH	DF10SH	--
Maximum repetitive peak reverse voltage	$V_{RRM}$	400	600	800	1000	V
Maximum DC blocking voltage	$V_{DC}$	400	600	800	1000	V
Average rectified output current per device @ $T_A = 40^\circ C$	$I_{(AV)}$	1.0				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	$I_{FSM}$	60				A
$I^2 t$ rating for fusing ( $t < 8.3ms$ )	$I^2 t$	10.4				A <sup>2</sup> S
Operating and storage temperature range	$T_J, T_{STG}$	-55 to +150				°C

**STATIC ELECTRICAL CHARACTERISTICS**

PARAMETER	TEST CONDITION		SYMBOL	MAX.	UNIT
Forward voltage	$I_F = 1.0A$	$T_J = 25^\circ C$	$V_F$	1.1	V
Leakage current	$V_R$ at rated	$T_J = 25^\circ C$ $T_J = 125^\circ C$	$I_R$	10 500	uA
Typical junction capacitance (Note 1)			$C_J$	25	pF

**THERMAL CHARACTERISTICS**

PARAMETER	SYMBOL	TYP.	UNIT
Typical thermal resistance (Note 2)	$R_{thJA}$	40	°C/W

**Note :**

- (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC
- (2) Thermal resistance junction to ambient in accordance with JESD-51.  
Unit mounted on P.C.B with 0.5 x 0.5" (13 x 13 mm) copper pad per pin.

REV. 3, APR.-2015, KBDA06

# RATING AND CHARACTERISTIC CURVES DF04SH thru DF10SH



FIG.1- FORWARD CURRENT DERATING CURVE

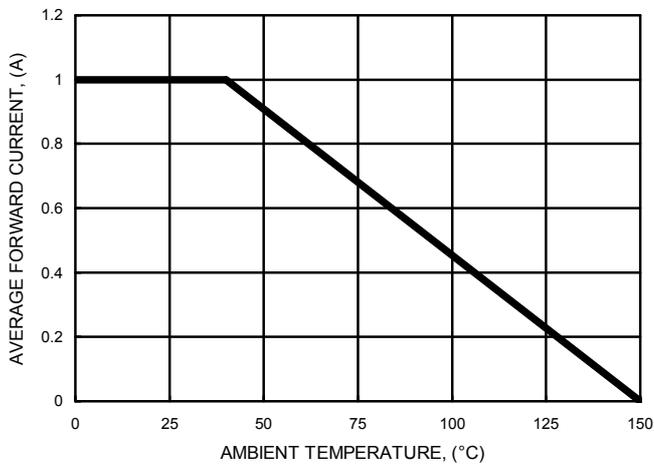


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

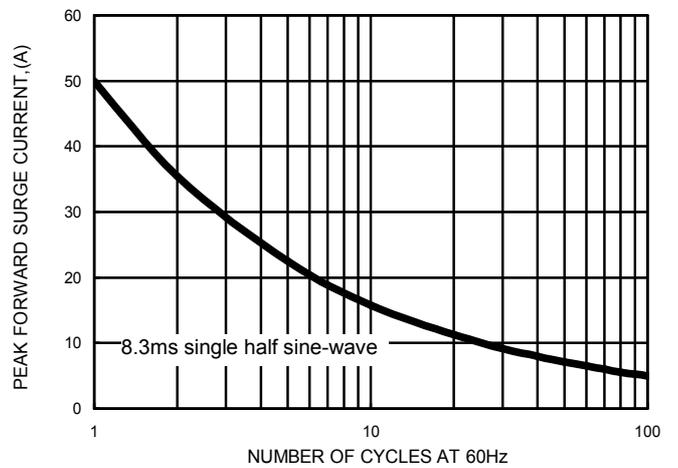


FIG.3- TYPICAL FORWARD CHARACTERISTICS

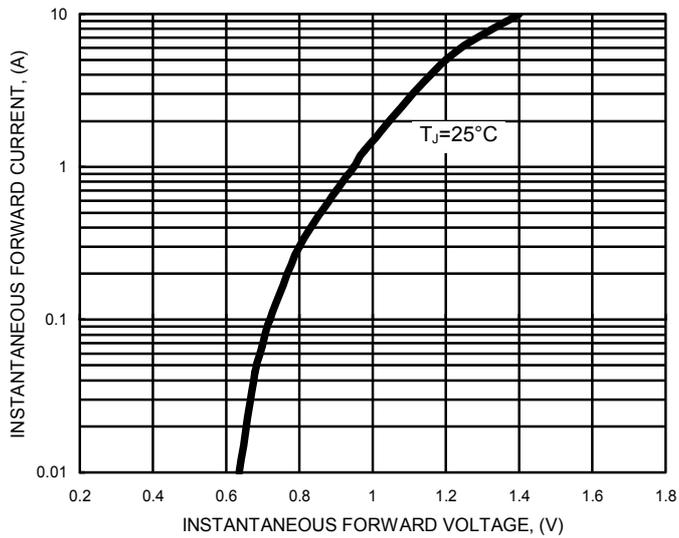


FIG.4- TYPICAL JUNCTION CAPACITANCE

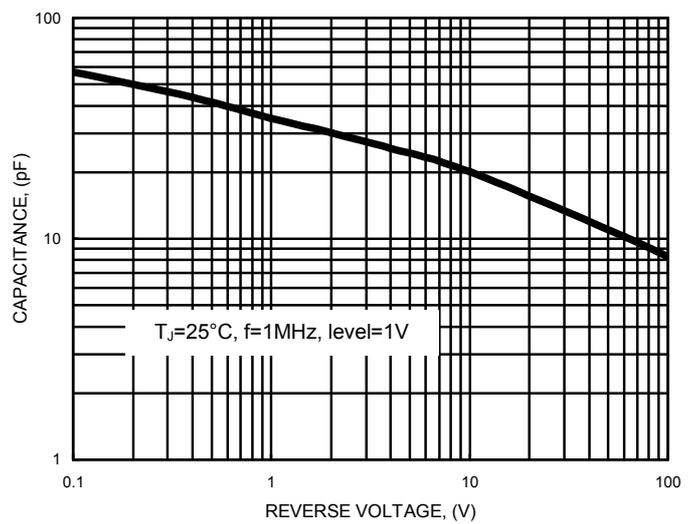
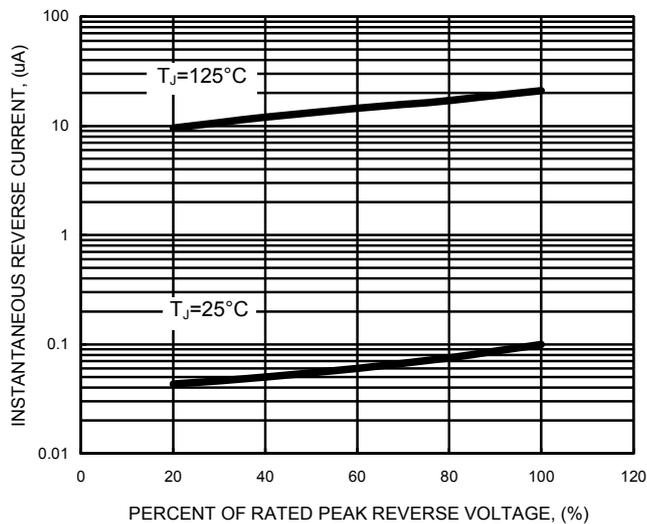


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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