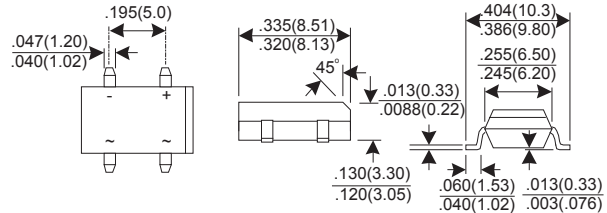


Description

DF005S~10S



Mechanical Dimensions



DFS

Dimensions in inches and (millimeters)

Features

- ★ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ★ High surge current capability
- ★ Ideal for printed circuit boards
- ★ Glass passivated structure

Mechanical Data

- ★ Case: Molded plastic body over passivated junctions
- ★ Terminals: Solderable per MIL-STD-750, method 2026
- ★ Polarity: As marked on body
- ★ Mounting position: Any
- ★ Weight: 0.04 ounce, 1.0 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	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 Rectified Current T _A =40°C	I _(AV)	1.0							A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	50							A
Maximum Instantaneous Forward Voltage @ 1.0 A	V _F	1.1							V
Maximum DC Reverse Current @T _J =25°C At Rated DC Blocking Voltage @T _J =125°C	I _R	5.0 250							uA uA
Rating for fusing (t < 8.3ms)	I ² t	10							A ² S
Typical junction Capacitance (Note 1)	C _J	25							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	40							°C/W
Operating Junctionand Storage Temperature Range	T _J , T _{STG}	-55 to + 150							°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

(2) Thermal Resistance from junction to ambient mounted on P.C.B with 0.5 x 0.5" (13x13mm) copper pads. □

RATINGS AND CHARACTERISTIC CURVES DF005S THRU DF10S

FIG.1 - FORWARD CURRENT DERATING CURVE

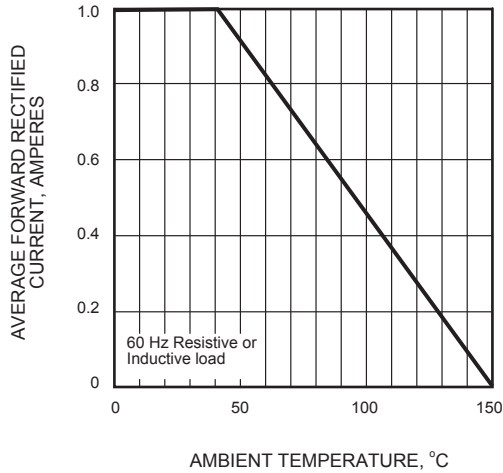


FIG.2 - MAXIMUM NON-REPETITIVE
PEAK FORWARD SURGE CURRENT

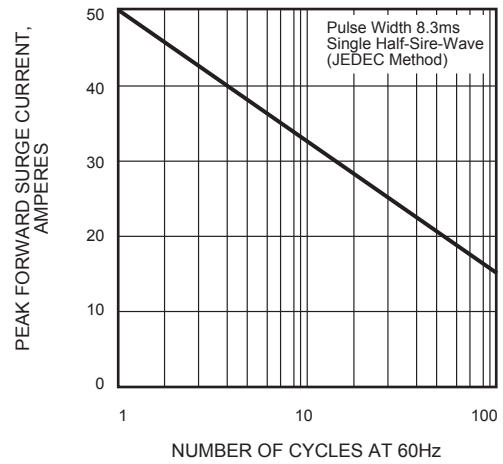


FIG.3 - TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

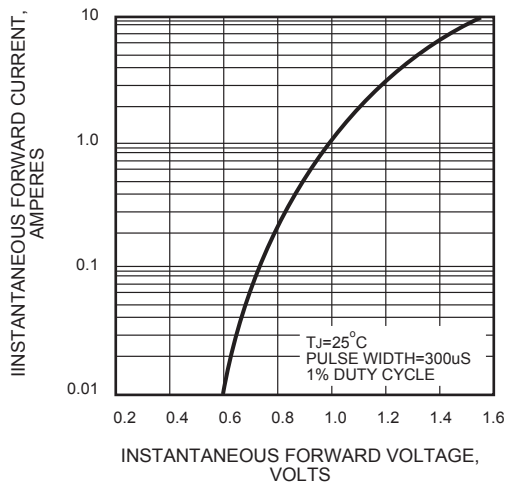


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

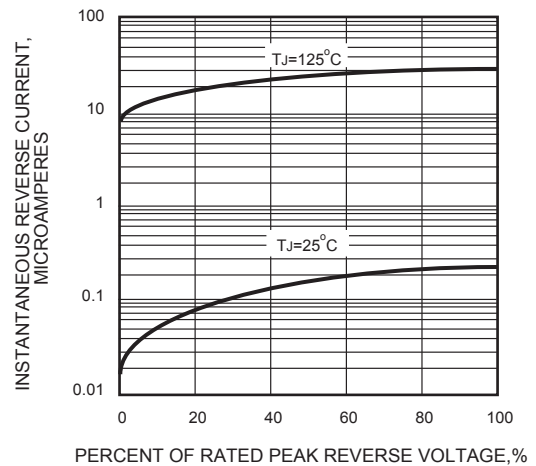


FIG.5 - TYPICAL JUNCTION CAPACITANCE

