

## Features

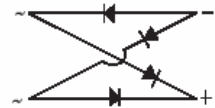
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit boards
- High surge current capability



Package: DFS

## Mechanical Data

- **Case:** DFS Molded plastic body
- **Terminals:** Plated leads solderable per MIL-STD-750 Method 2026
- High temperature soldering guaranteed: 260°C / 10 seconds
- 0.375 (9.5mm) lead length, 5lbs.(2.3kg) tension
- Mounting Position: Any



Schematic Diagram

## Maximum Ratings & Electrical Characteristics

(T<sub>A</sub>= 25°C unless otherwise noted)

Parameter	Symbol	DB52	DB54	DB56	DB59	DB510	DB515	DB520	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	40	60	90	100	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	28	42	63	70	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	40	60	90	100	150	200	V
Average Forward Rectified Output Current	I <sub>F(AV)</sub>	5.0							A
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	120							A
Rating for Fusig (t<8.3ms)	I <sup>2</sup> t	59							A <sup>2</sup> sec
Maximum Instantaneous Forward Voltage Drop per Leg at 5.0A	V <sub>F</sub>	0.55	0.70	0.82	0.85				V
Maximum DC Reverse Current at T <sub>J</sub> =25°C	I <sub>R</sub>	0.2			0.1			5	mA
Rated DC Blocking Voltage per Leg T <sub>J</sub> =100°C		10							
Typical Thermal Resistance per Leg (Note 1)	R <sub>θJA</sub>	40							°C/W
	R <sub>θJL</sub>	13							
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +125			-55 to +150			°C	
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

Note 1: Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.51" x 0.51" (13mm x 13mm) copper pads.

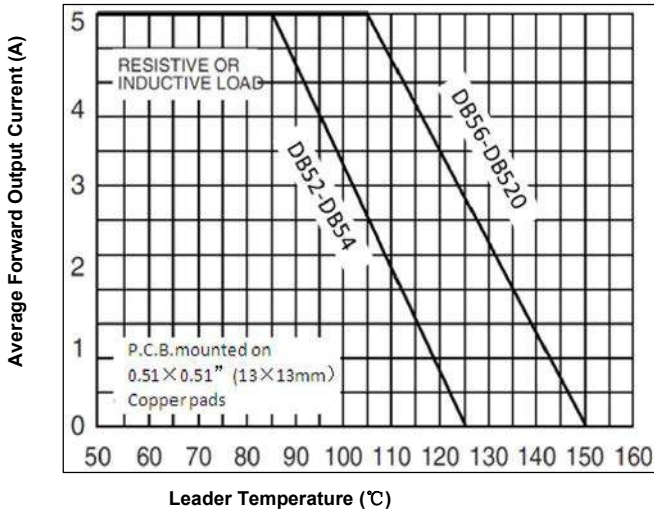
# DB52 thru DB520

Surface Mount Schottky Bridge Rectifier  
 Reverse Voltage 20 to 200V Forward Current 5A

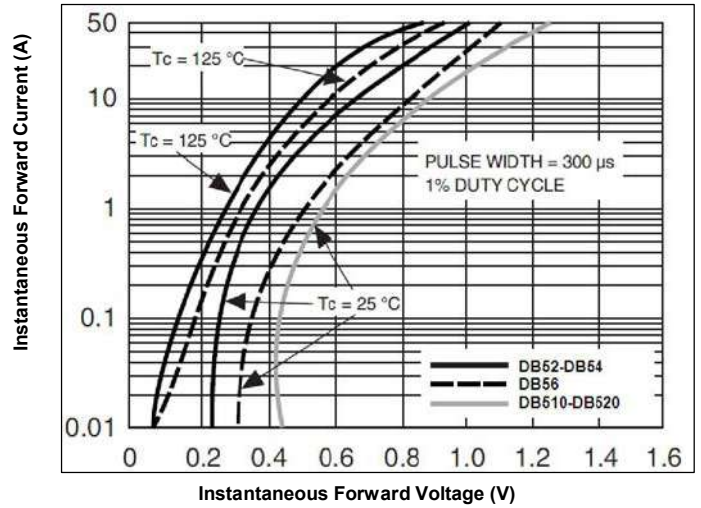
## Ratings and Characteristics Curves

( $T_A = 25^\circ\text{C}$  unless otherwise specified)

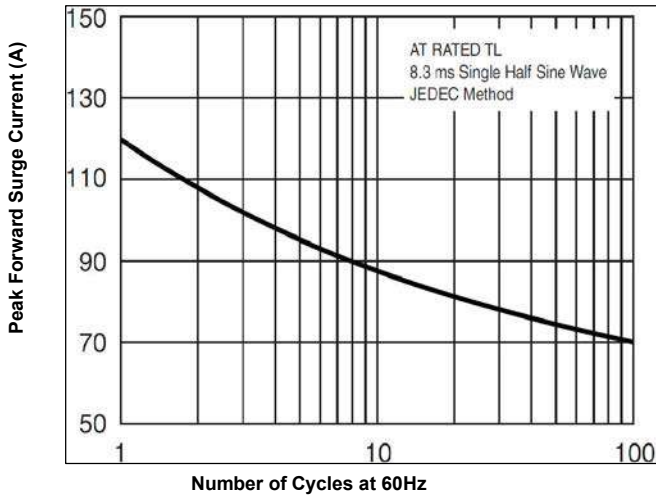
**Derating Curve Output Rectified Current**



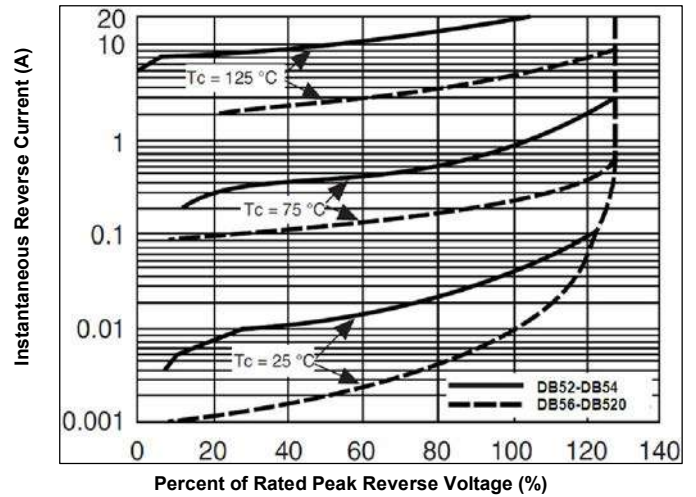
**Typical Instantaneous Forward Characteristics**



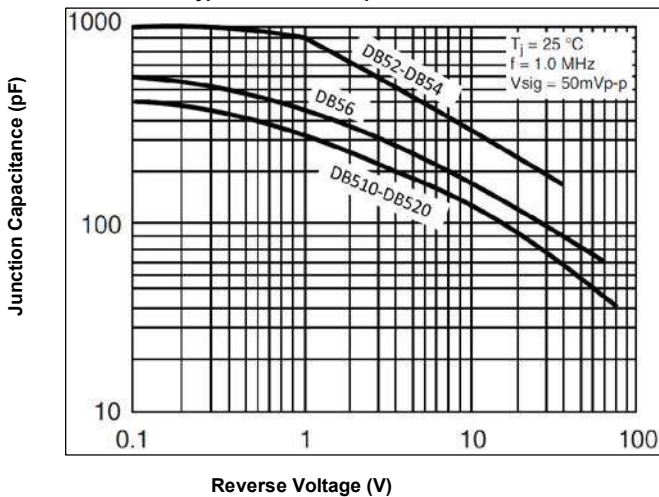
**Maximum Non-Repetitive Peak Forward Surge Current**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



## Package Outline Dimensions

## DFS

Dimensions in inches and (millimeters)

