

Features

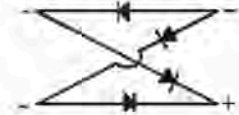
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit boards
- High surge current capability



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

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

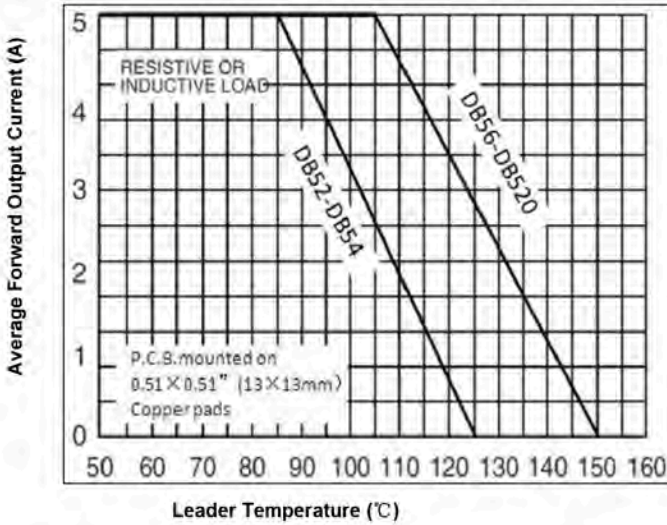
Parameter	Symbol	DB52	DB54	DB56	DB59	DB510	DB515	DB520	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	90	100	150	200	V
Maximum RMS Voltage	V_{RME}	14	28	42	63	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	90	100	150	200	V
Average Forward Rectified Output Current	$I_{F(AV)}$	5.0							A
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	120							A
Rating for Fusig ($t < 8.3\text{ms}$)	I^2t	59							A^2sec
Maximum Instantaneous Forward Voltage Drop per Leg at 5.0A	V_F	0.55		0.70		0.82		0.85	V
Maximum DC Reverse Current at $T_J = 25^\circ\text{C}$	I_R	0.2			0.1				mA
Rated DC Blocking Voltage per Leg $T_J = 100^\circ\text{C}$		10			5				
Typical Thermal Resistance per Leg (Note 1)	$R_{\theta JA}$	40							$^\circ\text{C/W}$
	$R_{\theta JL}$	13							
Operating Junction Temperature Range	T_J	-55 to +125			-55 to +150				$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

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

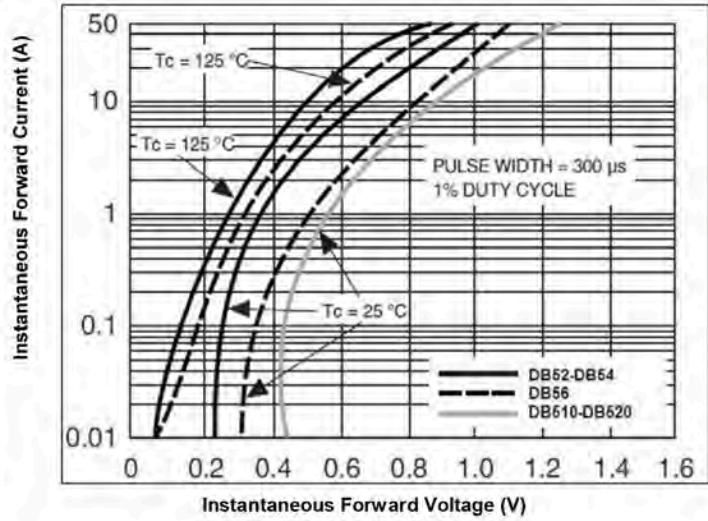
Ratings and Characteristics Curves

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

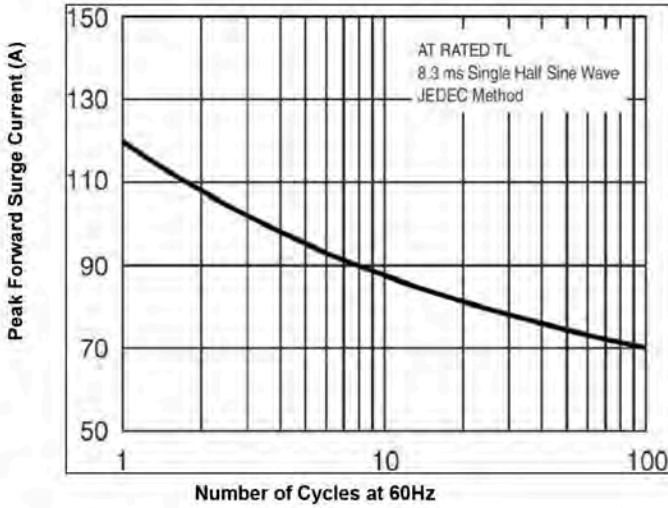
Derating Curve Output Rectified Current



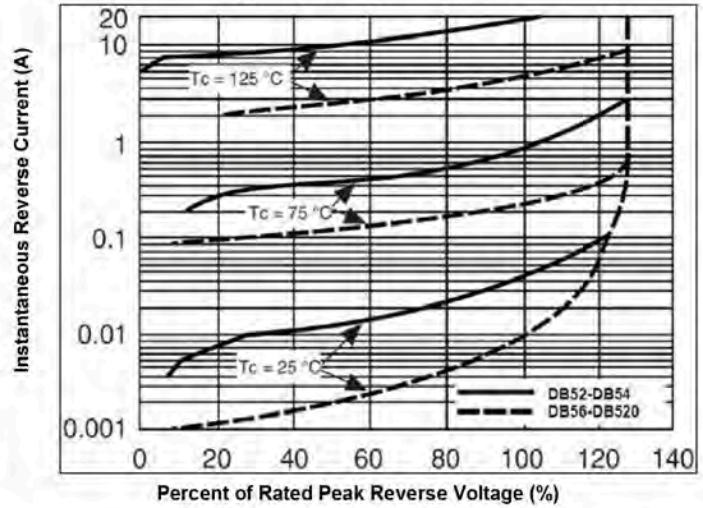
Typical Instantaneous Forward Characteristics



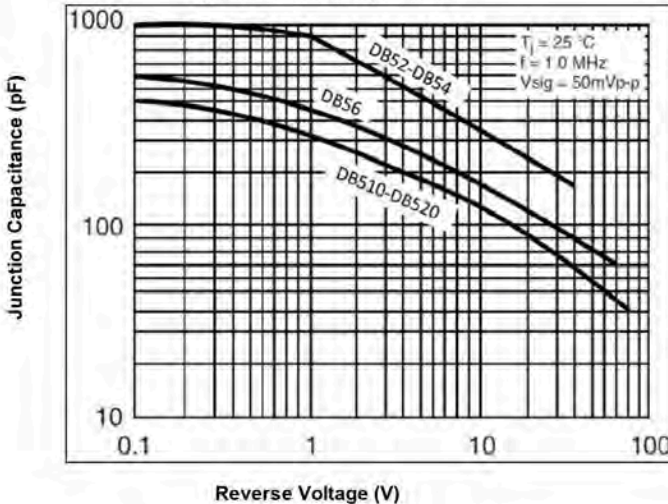
Maximum Non-Repetitive Peak Forward Surge Current



Typical Reverse Characteristics



Typical Junction Capacitance



Package Outline Dimensions

DFS

Dimensions in inches and (millimeters)

