

DB52 thru DB520

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

Features

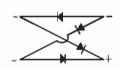
- Plastic package has Underwriters Laboratory
 Flammability Classification 94V-0
- Ideal for printed circuit boards
- High surge current capability

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



Package: DFS



Schematic Diagram

Maximum Ratings & Electrical Characteristics

(T_A= 25°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_{RMS}	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						•	Α
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	120							Α
Rating for Fusig (t<8.3ms)	l ² t	59							A ² sec
Maximum Instantaneous Forward Voltage Drop per Leg at 5.0A	VF	0.55 0.70		0.70	0.82		0.85		V
Maximum DC Reverse Current at T _J =25°C	lr.	0.2			0.1				mA
Rated DC Blocking Voltage per Leg T _J =100°C	IR	10			5] IIIA
Typical Thermal Resistance per Leg (Note 1)	R _{θJA}	40							°C/W
	$R_{\theta JL}$	13							
Operating Junction Temperature Range	TJ	-55 to +125 -55 to +150						•	°C
Storage Temperature Range	T _{STG}	-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" \times 0.51" (13mm \times 13mm) copper pads.



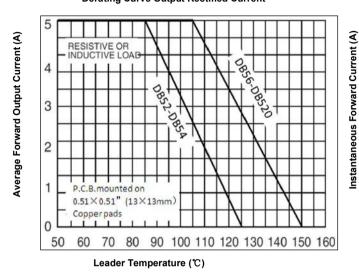
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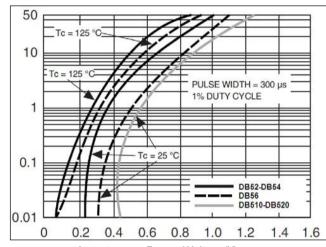
Ratings and Characteristics Curves

(TA = 25°C unless otherwise specified)

Derating Curve Output Rectified Current

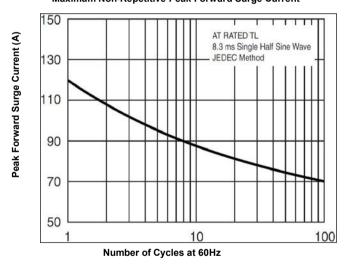


Typical Instantaneous Forward Characteristics

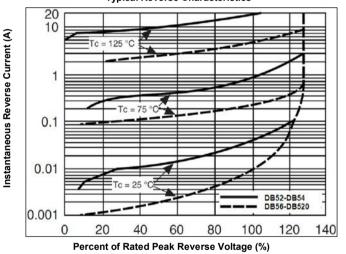


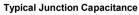
Instantaneous Forward Voltage (V)

Maximum Non-Repetitive Peak Forward Surge Current

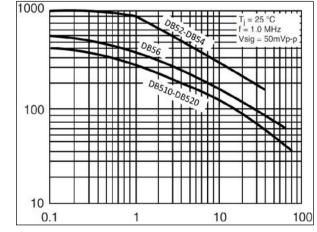


Typical Reverse Characteristics





Junction Capacitance (pF)



Reverse Voltage (V)



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Package Outline Dimensions

DFS

Dimensions in inches and (millimeters)

