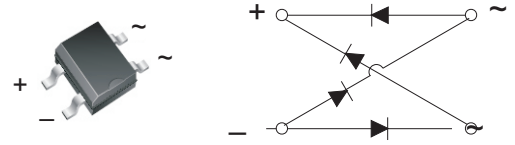




MDS22 thru MDS26

2.0A Surface Mount Schottky Barrier Bridge Rectifiers - 20V-60V



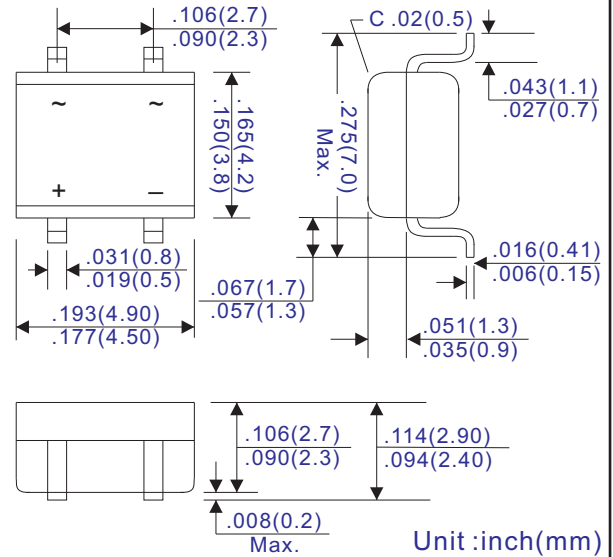
FEATURES

- Schottky barrier chips in MDS bridge
- Metal-Semiconductor junction with guard ring
- Highsurge current capability
- Silicon epitaxial planar chips
- For use in low voltage, high efficiency inverters, free wheeling, and polarity protection applications
- Lead-free part, meet RoHS requirements

MECHANICAL DATA

- Case: Mini-Dip bridge (TO-269AA) plastic molded case
- Epoxy: UL94-V0 rated flame retardant
- Terminals: Solderable per MIL-STD-750 Method 2026
- Polarity: As marked on body
- Mounting Position: Any
- Weight: 0.0078 ounces, 0.22 grams

SMD Mini-DIP (MDS)



MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

	Symbols	MDS22	MDS24	MDS26	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	20	40	60	Volts
Maximum RMS Voltage	VRMS	14	28	42	Volts
Maximum DC Blocking Voltage	VDC	20	40	60	Volts
Maximum Average Forward Rectified Current 0.2x0.2" (5.0x5.0mm) copper pad area, see Figure 1	I _{AV}	2.0			Amps
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50.0			Amps
Maximum Forward Voltage at 2.0A (Note 1)	V _F	0.50		0.70	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.5 20.0			mA
Typical Junction Capacitance (Note 2)	C _J	150			pF
Typical Thermal Resistance (Note 3)	R _{θJA} R _{θJL}	85.0 20.0			°C/W
Operating Junction Temperature Range	T _J	-55 ~ +125			°C
Storage Temperature Range	T _{STG}	-55 ~ +150			°C

Note 1. Pulse test: 300µS pulse width, 1% duty cycle
 2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts
 3. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2x0.2"(5.0x5.0mm) copper pad areas.



Fig. 1 - Forward Current Derating Curve

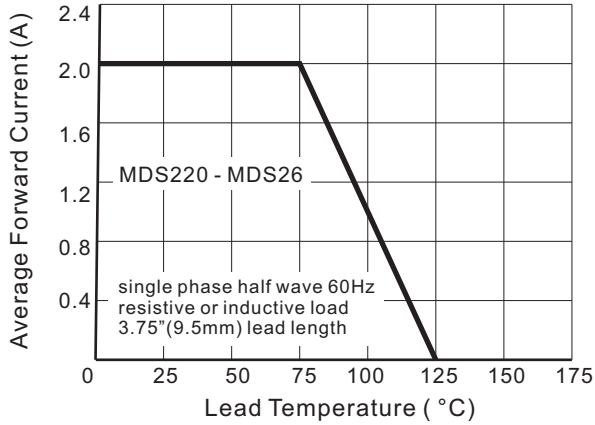


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

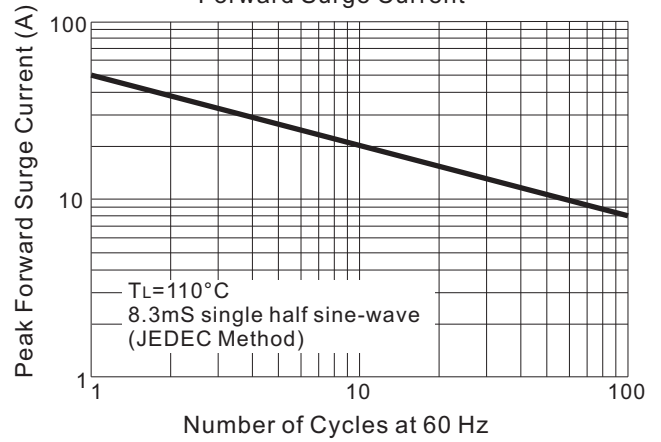


Fig. 3 - Typical Instantaneous Forward Characteristics

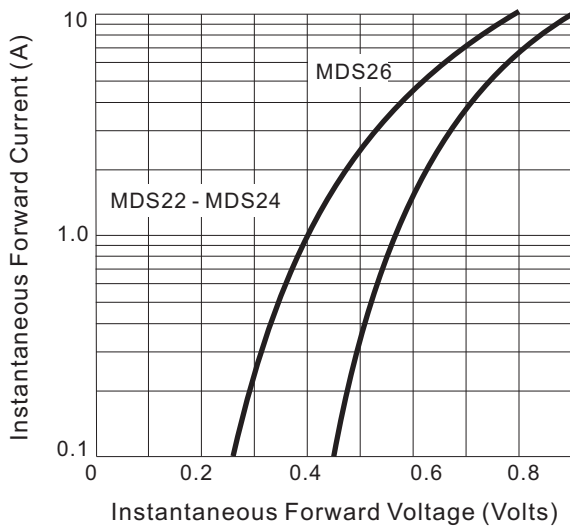


Fig. 4A - Typical Reverse Characteristics

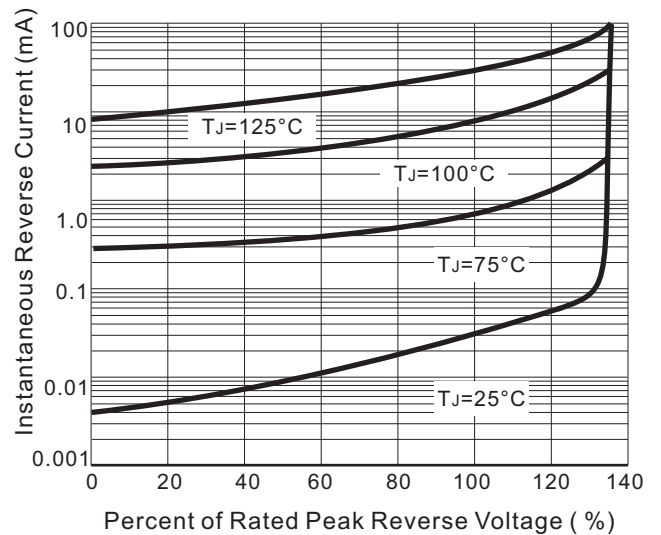
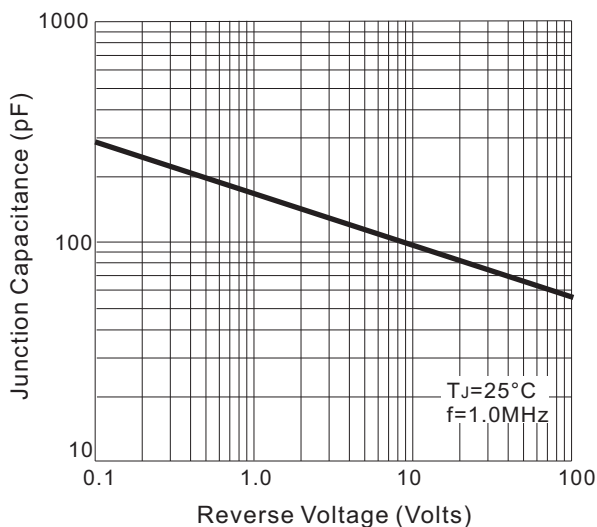


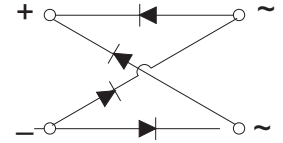
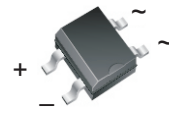
Fig. 5 - Typical Junction Capacitance





**MDS28 thru
 MDS210**

**2.0A Surface Mount Schottky
 Barrier Bridge Rectifiers - 80V-100V**



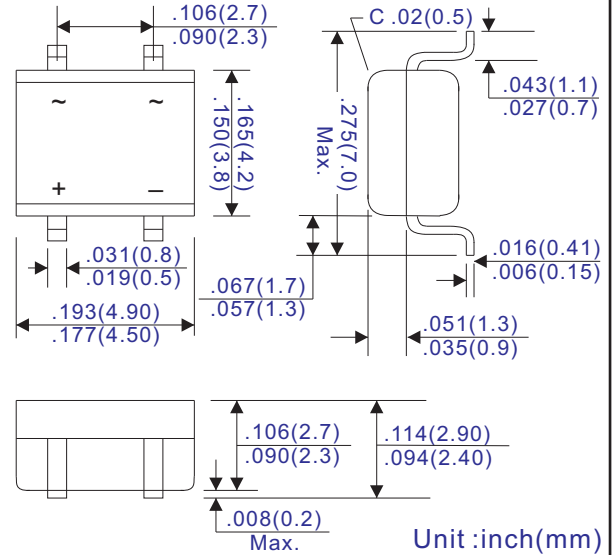
FEATURES

- Schottky barrier chips in MDS bridge
- Metal-Semiconductor junction with guard ring
- Highsurge current capability
- Silicon epitaxial planar chips
- For use in low voltage, high efficiency inverters, free wheeling, and polarity protection applications
- Lead-free part, meet RoHS requirements

MECHANICAL DATA

- Case: Mini-Dip bridge (TO-269AA) plastic molded case
- Epoxy: UL94-V0 rated flame retardant
- Terminals: Solderable per MIL-STD-750 Method 2026
- Polarity: As marked on body
- Mounting Position: Any
- Weight: 0.0078 ounces, 0.22 grams

SMD Mini-DIP (MDS)



MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

	Symbols	MDS28	MDS29	MDS210	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	80	90	100	Volts
Maximum RMS Voltage	VRMS	56	63	70	Volts
Maximum DC Blocking Voltage	VDC	80	90	100	Volts
Maximum Average Forward Rectified Current 0.2x0.2" (5.0x5.0mm) copper pad area, see Figure 1	I _{AV}	2.0			Amps
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50.0			Amps
Maximum Forward Voltage at 2.0A (Note 1)	V _F	0.85			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.5 20.0			mA
Typical Junction Capacitance (Note 2)	C _J	125			pF
Typical Thermal Resistance (Note 3)	R _{θJA} R _{θJL}	85.0 20.0			°C/W
Operating Junction Temperature Range	T _J	-55 ~ +150			°C
Storage Temperature Range	T _{STG}	-55 ~ +150			°C

Note 1. Pulse test: 300µS pulse width, 1% duty cycle
 2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts
 3. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2x0.2"(5.0x5.0mm) copper pad areas.



Fig. 1 - Forward Current Derating Curve

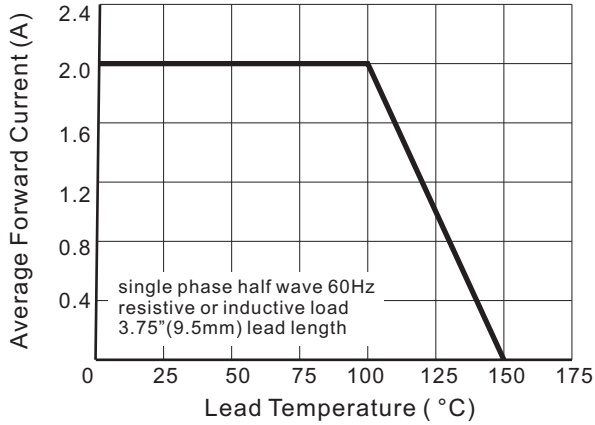


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

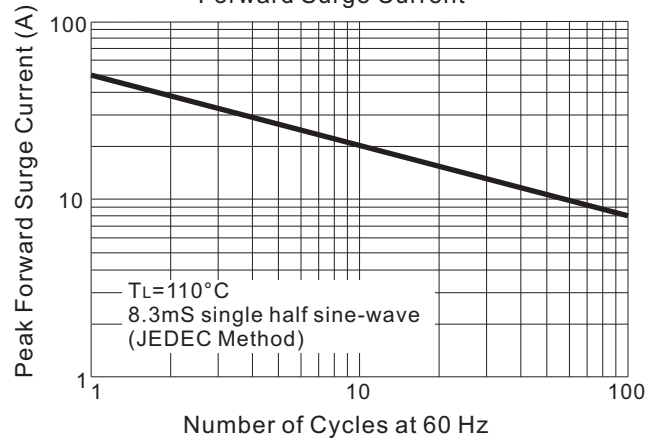


Fig. 3 - Typical Instantaneous Forward Characteristics

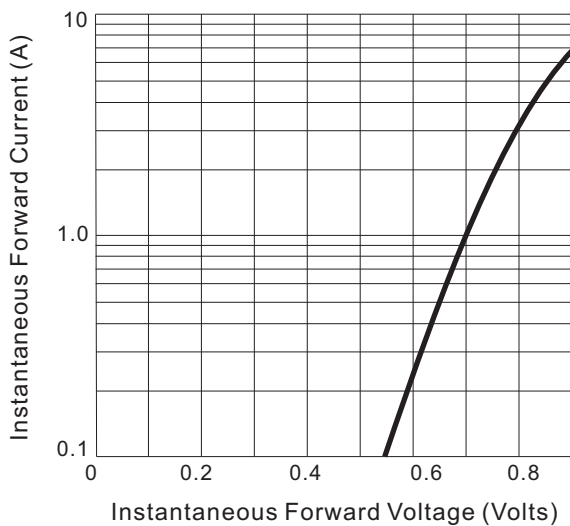


Fig. 4 - Typical Reverse Characteristic

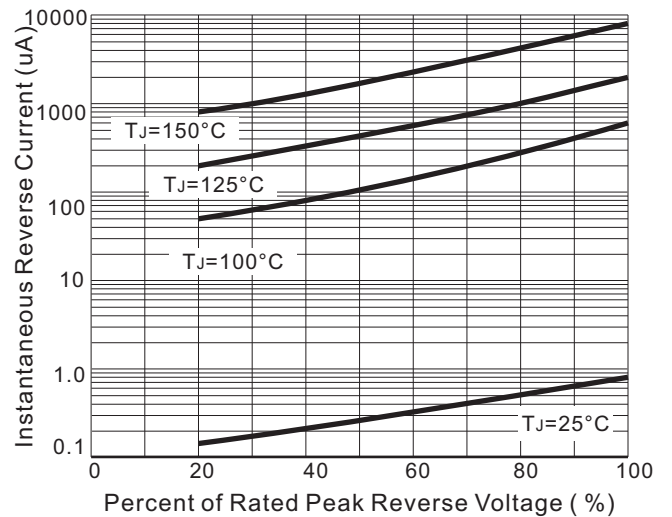


Fig. 5 - Typical Junction Capacitance

