

MS18F SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 80-200 Volts **CURRENT** 1 Ampere

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- High current capacity ,low V_F
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

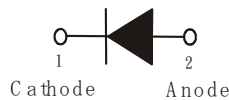
MECHANICAL DATA

Case : SMAF, Plastic

Terminals : Solderable per MIL-STD-750, Method 2026

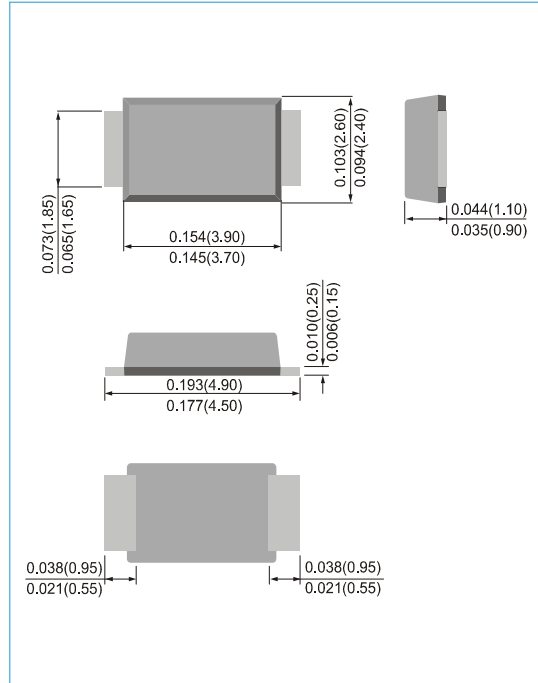
Polarity: Color band denotes cathode end

Weight: 0.0011 ounces, 0.0328 grams



SMAF

Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	MS18F	MS19F	MS110F	MS115F	MS120F	UNITS
Recurrent Peak Reverse Voltage	V _{RRM}	80	90	100	150	200	V
RMS Voltage	V _{RMS}	56	63	70	105	140	V
DC Blocking Voltage	V _R	80	90	100	150	200	V
Average Forward Current	I _{F(AV)}	1.0					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30					A
Forward Voltage at 1.0A	V _F	0.8			0.9		V
DC Reverse Current at Rated DC Blocking Voltage	I _R	0.05					mA
Typical Junction Capacitance V _R =4V,f=1MHz	C _J	50			40	30	pF
Typical Thermal Resistance ,Junction to Ambient (Note 1) Junction to Lead (Note 2)	R _{θJA} R _{θJL}	150 19					°C/W
Operating Junction Temperature and Storage Temperature Range	T _J ,T _{STG}	-65 to +175					°C

NOTES:

1. Mounted on an FR4 PCB, single-sided copper, mini pad.
2. Mounted on an FR4 PCB, single-sided copper, with 48cm² copper pad area.

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RATING AND CHARACTERISTIC CURVES

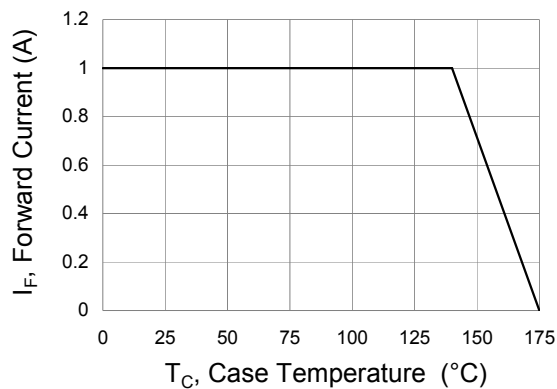


Fig.1 Forward Current Derating Curve

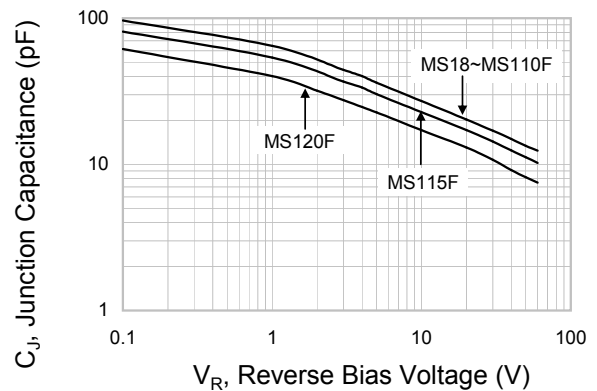


Fig.2 Typical Junction Capacitance

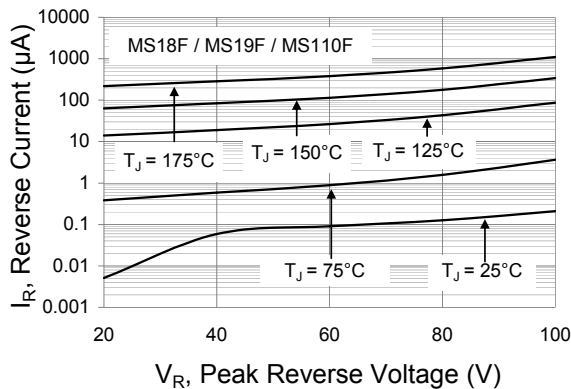


Fig.3 Typical Reverse Characteristics

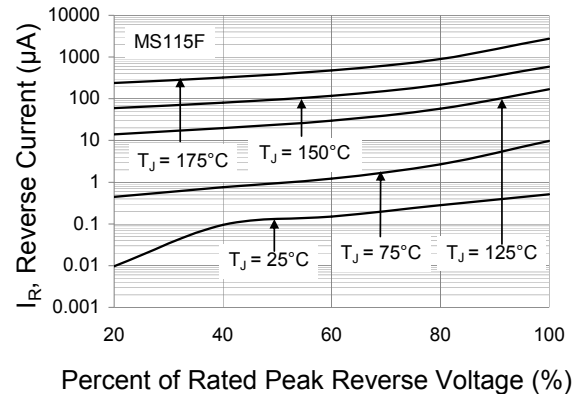


Fig.4 Typical Reverse Characteristics

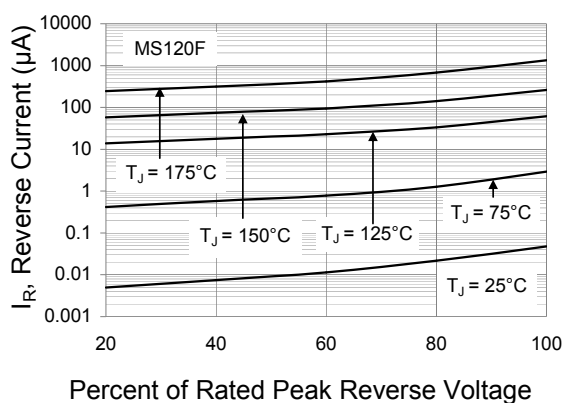


Fig.5 Typical Reverse Characteristics

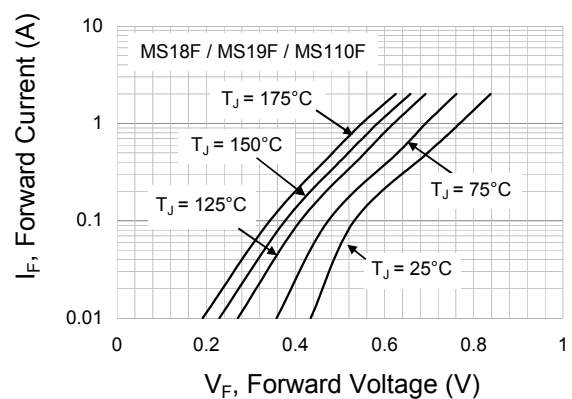


Fig.6 Typical Forward Characteristics

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RATING AND CHARACTERISTIC CURVES

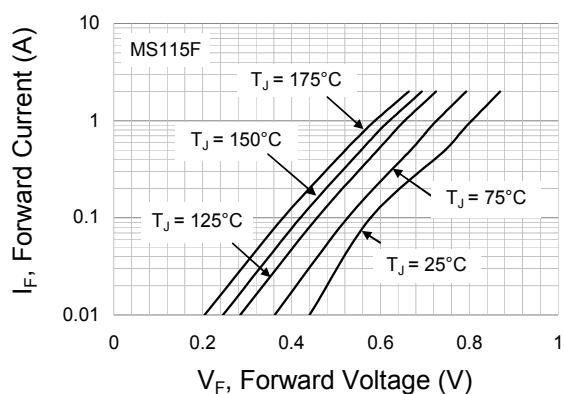


Fig.7 Typical Forward Characteristics

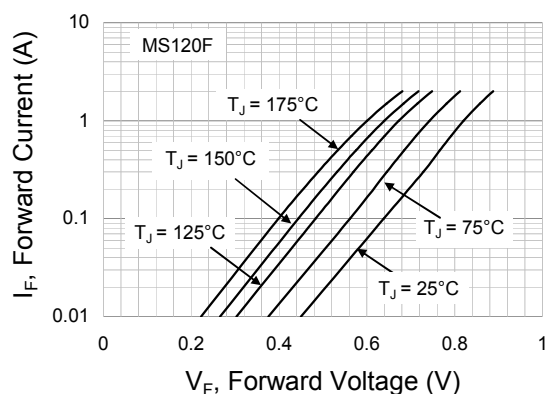


Fig.8 Typical Forward Characteristics