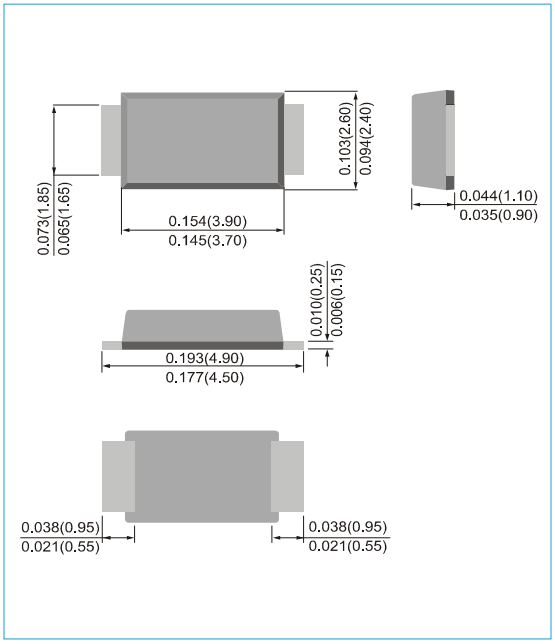
MS18F SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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

SMAF Unit : inch(mm)



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)

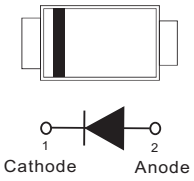
MECHANICAL DATA

Case : SMAF, Plastic

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

Polarity: Color band denotes cathode end

Weight: 0.0011 ounces, 0.0328 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°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					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30					A
Forward Voltage at 1A	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)	$R_{\Theta JA}$ $R_{\Theta JL}$	150 19					°C/W
Operating Junction Temperature and Storage Temperature Range	T_J,T_{STG}	-55 to +150					°C

NOTES : 1. Mounted on an FR4 PCB, single-sided copper, mini pad.
2. Mounted on an FR4 PCB, single-sided copper, with 48cm^2 copper pad area

MS18F SERIES

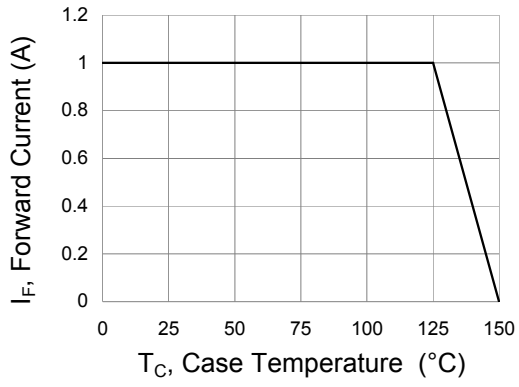


Fig.1 Forward Current Derating Curve

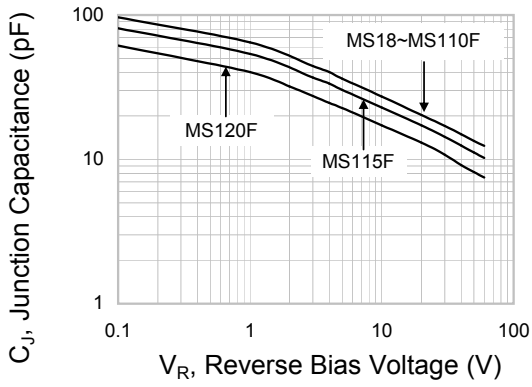


Fig.2 Typical Junction Capacitance

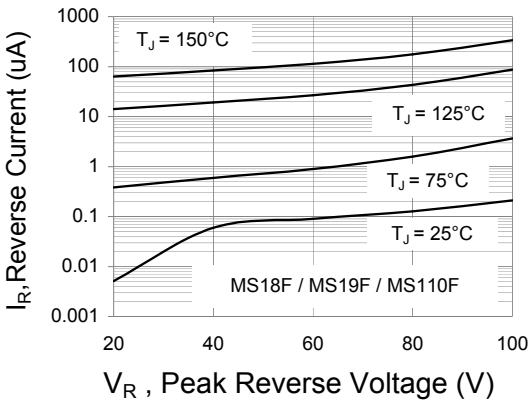


Fig.3 Typical Reverse Characteristics

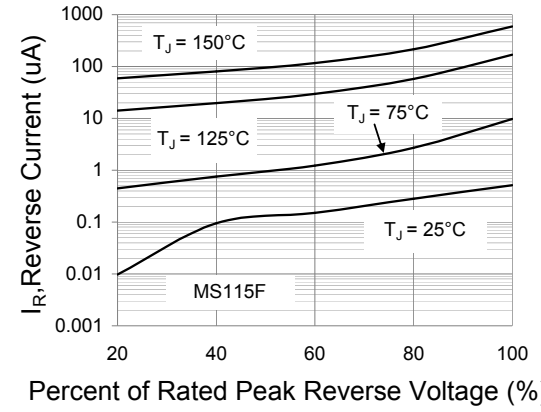


Fig.4 Typical Reverse Characteristics

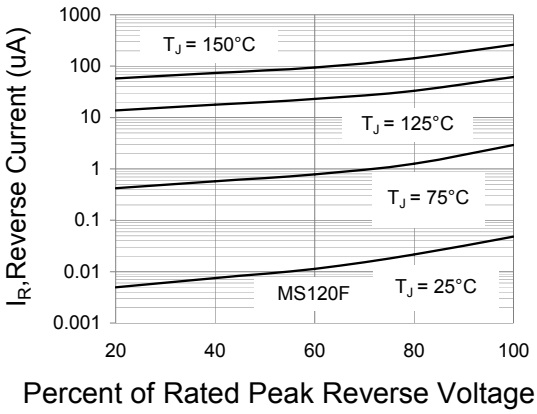


Fig.5 Typical Reverse Characteristics

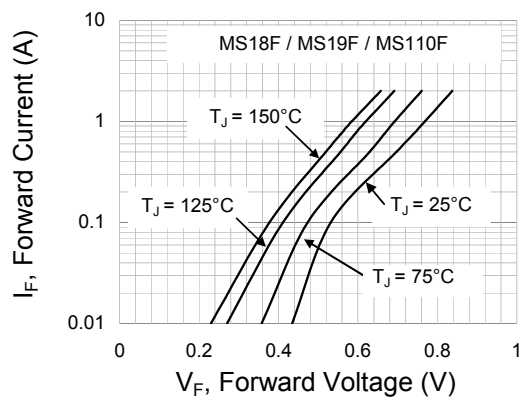


Fig.6 Typical Forward Characteristics

MS18F SERIES

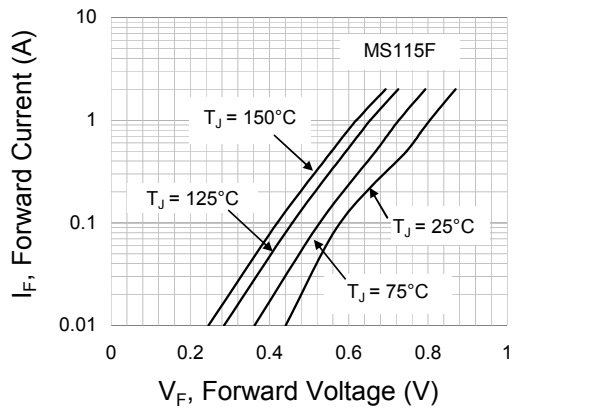


Fig.7 Typical Forward Characteristics

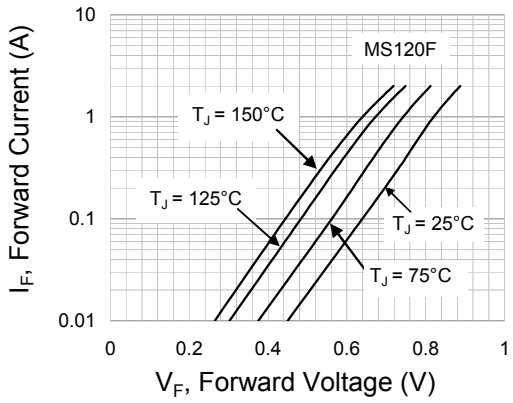
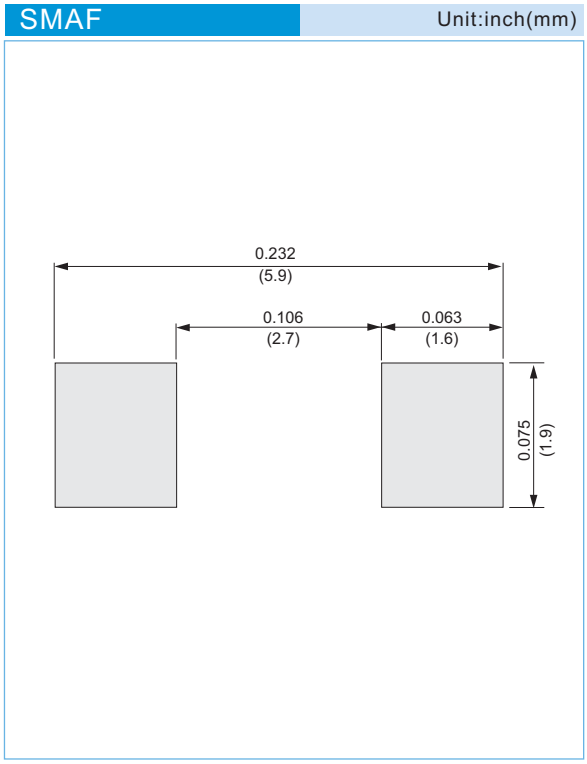


Fig.8 Typical Forward Characteristics

MS18F SERIES

MOUNTING PAD LAYOUT

SMAF Unit:inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

LEGAL STATEMENT

MS18F SERIES

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
T/B	A	N/A	0	HF	0	serial number
T/R	R	7"	1	RoHS	1	serial number
B/P	B	13"	2			
T/P	T	26mm	X			
TRR	S	52mm	Y			
TRL	L	PBCU	U			
FORMING	F	PBCD	D			

Part No_packing code_Version

MS18F_R1_00001

MS18F_R2_00001