



MBR140SF

Schottky Barrier Rectifiers

Features

- For use in low voltage,high frequency inverters
- Free wheeling,and polarity protection applications

Mechanical Data

- Case:Molded plastic body
- Terminals:Plated leads solderable per MIL-STD-750, Method 2026
- Polarity:Polarity symbols marked on case
- Marking:L4F



cathode 1  2 Andoe

Maximum Ratings And Electrical Characteristics,Single Diode@T_a=25°C

Parameter	Symbol	Value	Units
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	V _{RRM} V _{RWM} V _R	40	V
RMS Reverse Voltage	V _{RMS}	28	V
Average Rectified Output Current	I _O	1	A
Peak Forward Surge Current@8.3 ms	I _{FSM}	25	A
Repetitive Peak Forward Current	I _{FRM}	625	mA
Power Dissipation	P _D	250	mW
Thermal Resistance Junction to Ambient	R _{θJA}	500	°C/W
Storage Temperature Range	T _{STG}	-65~+150	°C
Non-Repetitive Peak Reverse Voltage	V _{RM}	20	V

Electrical Characteristics(T_a=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Max	Unit
Reverse Breakdown Voltage	V _(BR)	I _R =1mA	40		V
Reverse Voltage Leakage Current	I _R	V _R =40V		1	mA
Forward Voltage	V _F	I _F =1A		0.6	V
Diode Capacitance	C _D	V _R =4V,f=1MHz		120	pF



Typical Characteristic

FIG. 1- FORWARD CURRENT DERATING CURVE

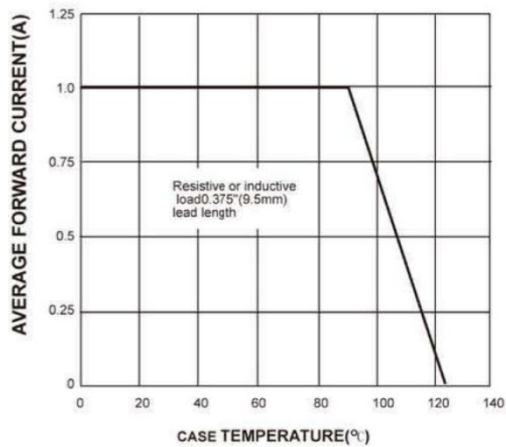


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

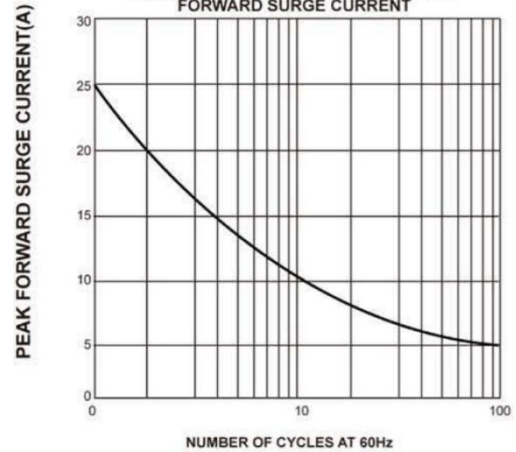


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

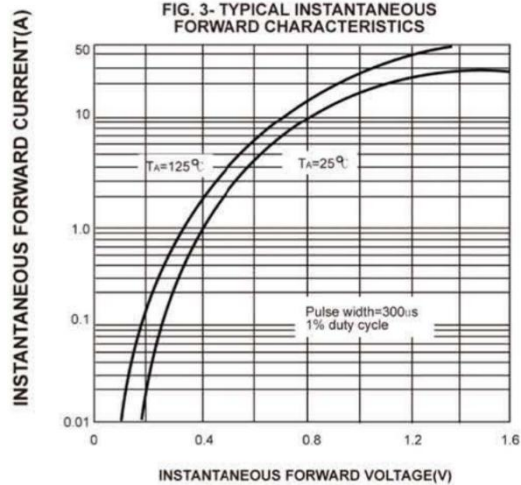


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

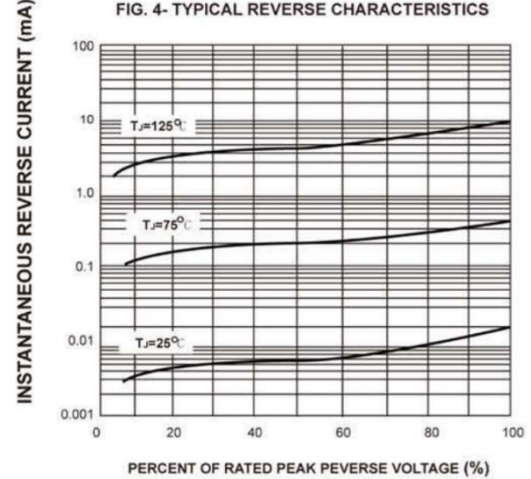


FIG. 5- TYPICAL JUNCTION CAPACITANCE

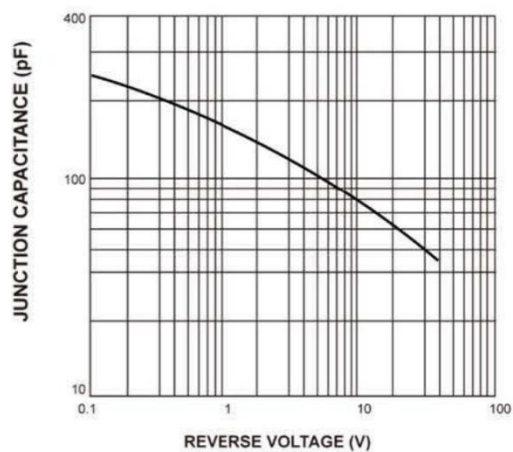
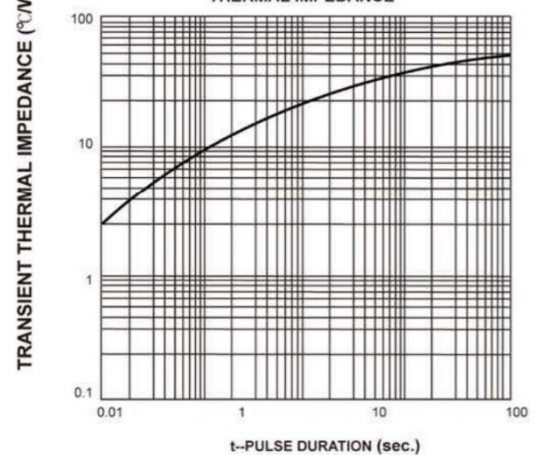
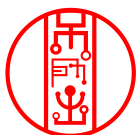


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE





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Package Information

SOD-123

Dimensions in mm

