



5A Low VF SCHOTTKY BARRIER RECTIFIER

Reverse Voltage 45 Volts Forward Current 5.0 Amperes

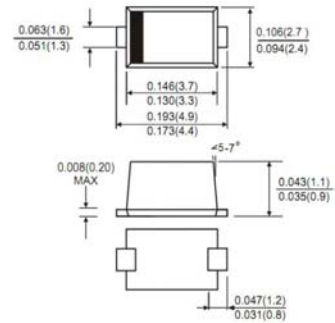
Features

- Metal silicon junction, majority carrier conduction
- Guardring for overvoltage protection
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection application

Mechanical Data

- Case: SMAF molded plastic body
- Terminals: Plated leads, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any

SMA-FL



Maximum Ratings

Item	Symbol	Unit	Conditions	SS545L
Repetitive Peak Reverse Voltage	VRRM	V		45
Average Rectified Output Current	I _o	A	60Hz sine wave, R- load, T _a =25°C	5
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60Hz sine wave, 1 cycle, T _a =25°C	100
Storage Temperature	T _{stg}	°C		-55 ~ +150
Junction Temperature	T _j	°C		-55 ~ +125
Thermal Resistance (Typical)	R _{θJ-C}	°C/W	Between Junction and Case (Note 1)	8

Electronic Characteristics (T_a=25°C Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Min	Typ	Max
Peak Forward Voltage	V _{FM}	V	IFM = 5.0A, T _j = 25°C	-	0.41	0.44
			IFM = 5.0A, T _j = 125°C	-	0.36	0.40
Reverse Breakdown Voltage	V _{BR}	V	IR=0.5mA	45	58	-
Leakage Current	IR	mA	VR=45V, T _j =25°C		0.04	0.2
			VR=45V, T _j =125°C		10	50

Notes:

1. Device mounted on FR-4 substrate, 1" x 1", 2oz, single-sided, PC boards with 0.56" x 0.73" copper pad.



RATINGS AND CHARACTERISTIC CURVES

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

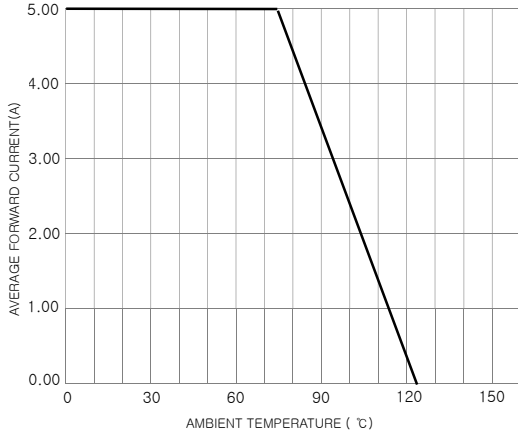


FIG. 2 – TYPICAL FORWARD CHARACTERISTICS

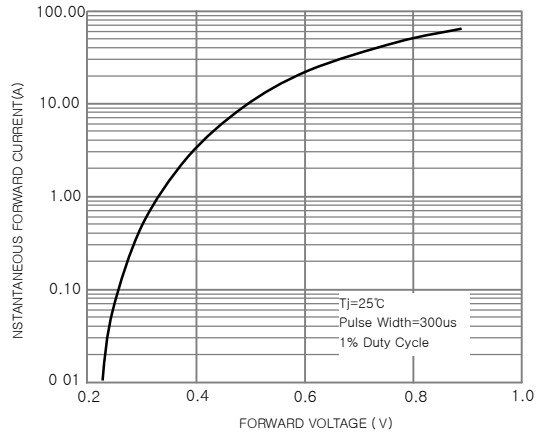


FIG. 3 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

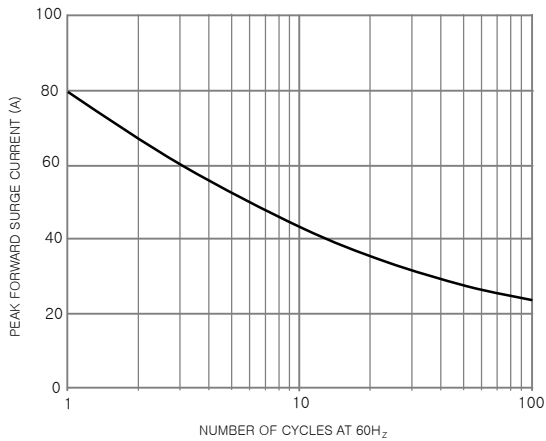


FIG. 4 – TYPICAL REVERSE CHARACTERISTICS

