

F.E.C. Semiconductor

II. Schottky Rectifier

5.0A Surface Mount Schottky Rectifier

S55L~S56L

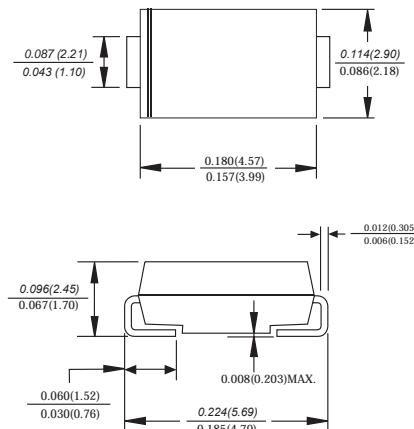
FEATURES

- Metal-Semiconductor junction with gard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low vlotage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case: Molded Plastic
- Polarity:Color band denotes cathode

DO-214AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load derate by 20%.

CHARACTERISTICS	SYMBOL	S55L	S56L	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	60	V
Maximum RMS Voltage	V _{RMS}	35	42	V
Maximum DC Blocking Voltage	V _{DC}	50	60	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Lengths	I _(AV)		5.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I _{FSM}		150	A
Maximum Forward Voltage at 5.0A DC	V _F		0.55	V
Maximum DC Reverse Current @ T _J =25°C at Rated DC Bolcking Voltage @ T _J =100°C	I _R		1.0 50	mA
Typical Junction Capacitance (Note1)	C _J		350	pF
Typical Thermal Resistance (Note2)	R _{θJA}		10	°C/W
Operating Temperature Range	T _J		-55 to +150	°C
Storage Temperature Range	T _{STG}		-55 to +150	°C

NOTES: 1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

2.Thermal resistance junction to ambient,

RATING AND CHARACTERISTIC CURVES S55L THRU S56L

FIG. 1 – FORWARD CURRENT DERATING CURVE

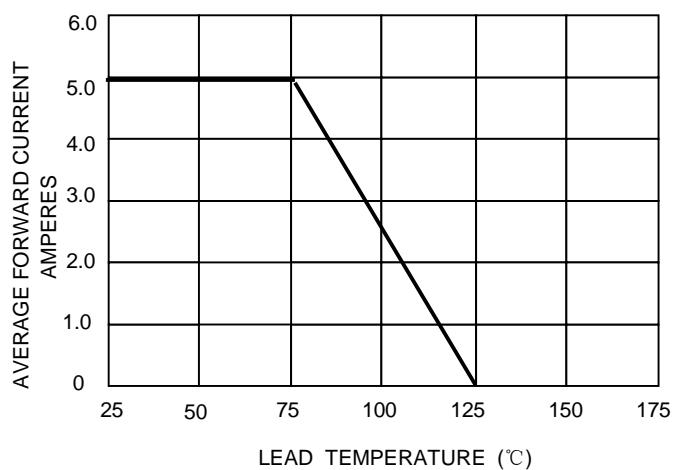


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

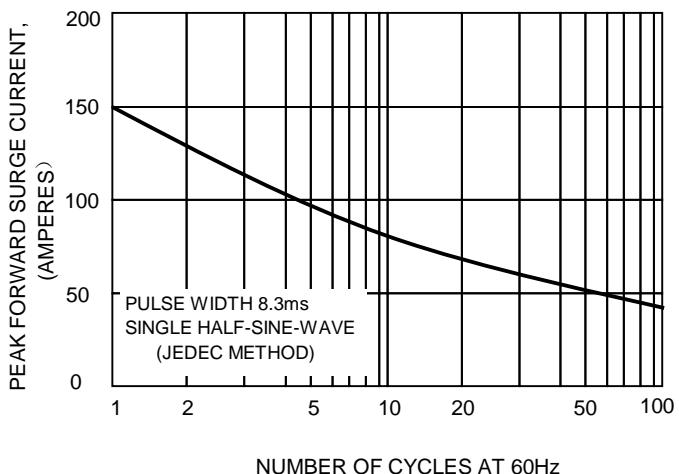


FIG.3 – TYPICAL JUNCTION CAPACITANCE

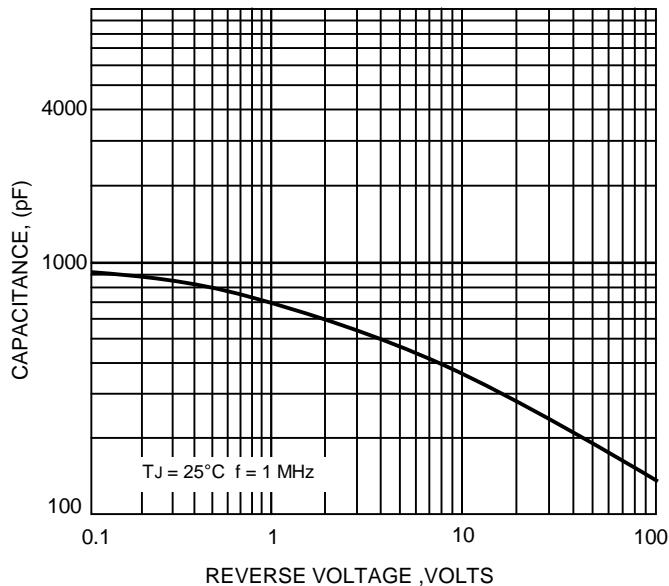


FIG.4-TYPICAL FORWARD CHARACTERISTICS

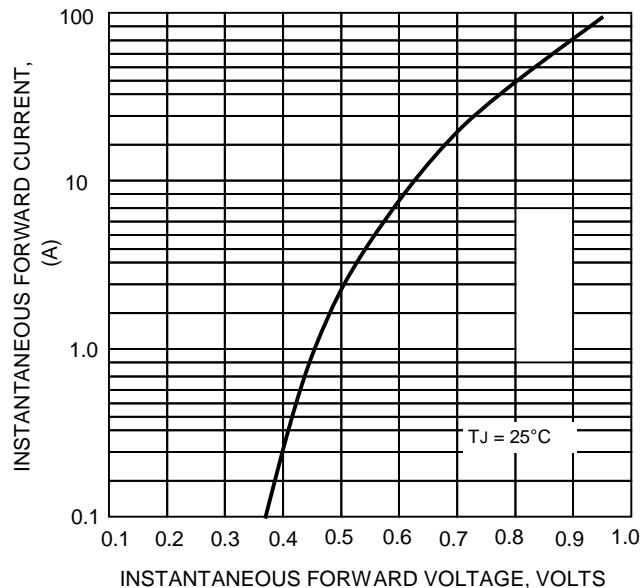


FIG.2-TYPICAL REVER CHARACTERISTICS

