

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 40 Volts CURRENT 1.0 Ampere

FEATURES

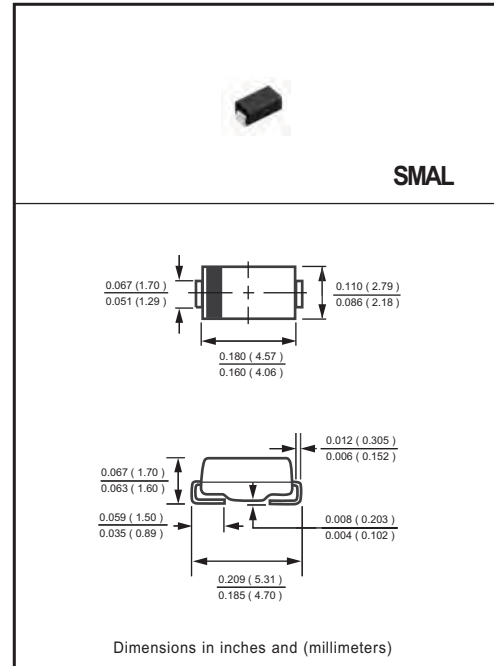
- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * Mounting position: Any
- * Weight: 0.057 gram

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-0

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Resistive or inductive load.



MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	FM5817L	FM5818L	FM5819L	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current at T _A = 90°C	I _O	1.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	25			Amps
Typical Current Square Time	I ² T	2.5			A ² S
Typical Thermal Resistance (Note 3)	R _{θJA}	88			°C/W
	R _{θJL}	28			
Typical Junction Capacitance (Note 1)	C _J	110			pF
Operating Temperature Range	T _J	150			°C
Storage Temperature Range	T _{STG}	-55 to + 150			°C

ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	FM5817L	FM5818L	FM5819L	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC	V _F	.45	.55	.60	Volts
Maximum Instantaneous Forward Voltage at 3.1A DC	V _F	.75	.875	.90	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@T _A = 25°C	0.2			mAmps
	@T _A = 100°C	10			mAmps

- NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
4. Also available in SMBL.
3. Thermal Resistance : Mounted on PCB.

RATING AND CHARACTERISTICS CURVES (FM5817L THRU FM5819L)

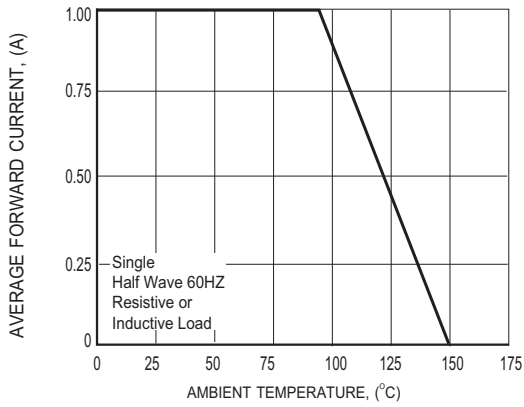


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

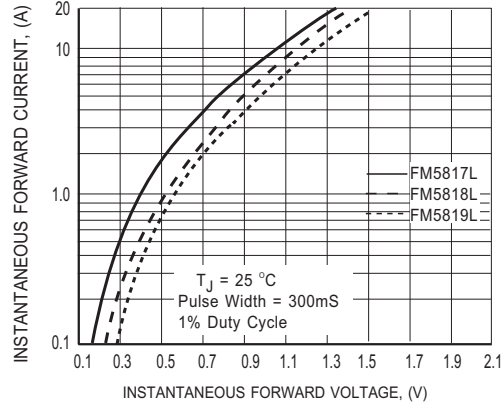


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

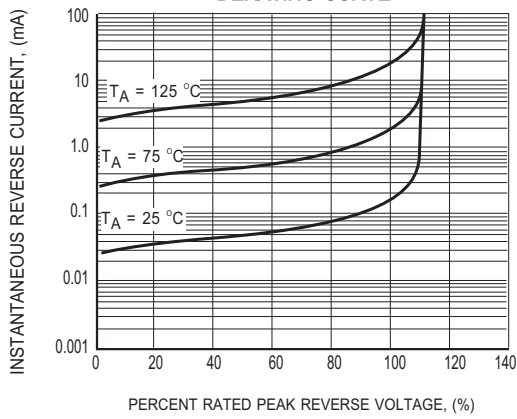


FIG.3 TYPICAL REVERSE CHARACTERISTICS

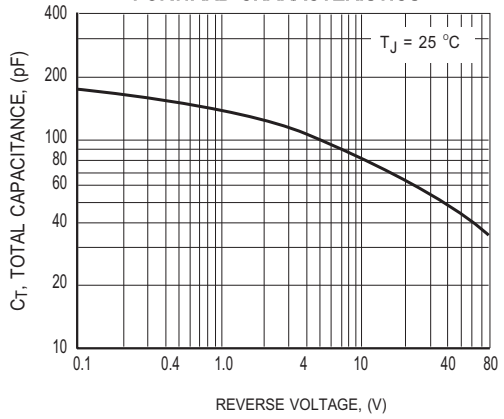


FIG.4 TYPICAL JUNCTION CAPACITANCE

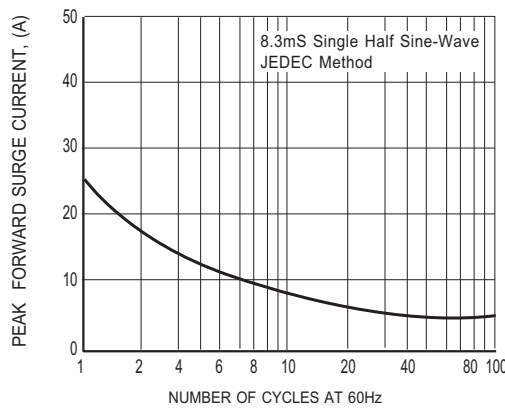
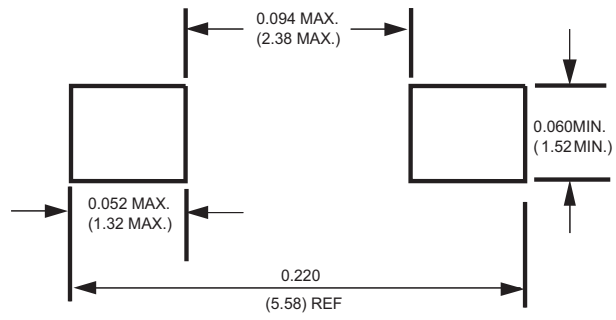


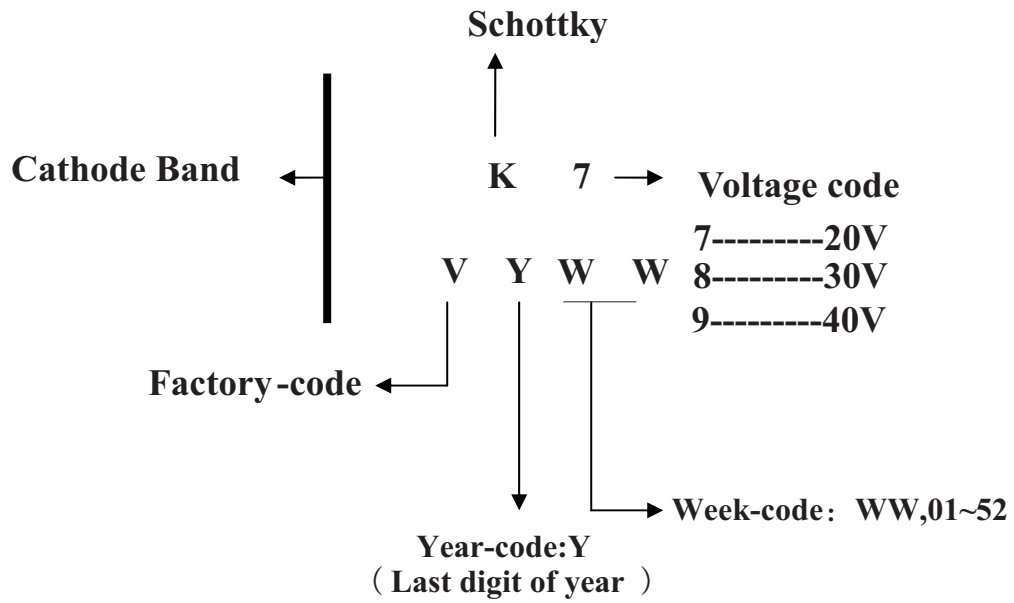
FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Mounting Pad Layout



Dimensions in inches and (millimeters)

Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMA	-T	1,500	6,000	---	---	178	390*205*310	48,000	8.40
SMA	-W	5,000	10,000	---	---	330	360*355*360	80,000	14.20

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