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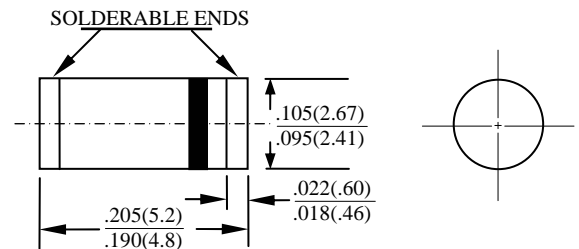
## 1A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS SM5817-LFR THRU SM1010-LFR

### FEATURES

- EXTREMELY LOW VF
- LOW STORED CHARGE, MAJORITY CARRIER CONDUCTION
- LOW POWER LOSS / HIGH EFFICIENCY
- UL 94V-0 FLAME RETARDANT EPOXY MOLDING COMPOUND
- ROHS

### MECHANICAL DATA

- CASE: TRANSFER MOLDED, MELF, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: SOLDERABLE PER MIL-STD-750, METHOD 2026
- POLARITY: CATHODE INDICATED BY COLOR BAND
- WEIGHT: 0.135 GRAMS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED  
SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

RATINGS	SYMBOL	SM5817 -LFR	SM5818 -LFR	SM5819 -LFR	SM105 -LFR	SM106 -LFR	SM107 -LFR	SM108 -LFR	SM109 -LFR	SM1010 -LFR	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	$V_{RRM}$	20	30	40	50	60	70	80	90	100	V
MAXIMUM RMS VOLTAGE	$V_{RMS}$	14	21	28	35	42	49	56	63	70	V
MAXIMUM DC BLOCKING VOLTAGE	$V_{DC}$	20	30	40	50	60	70	80	90	100	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT AT $T_J=90^\circ\text{C}$	$I_O$	1.0									A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	25									A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	$C_J$	110	70								PF
STORAGE TEMPERATURE RANGE	$T_{STG}$	- 55 TO + 150									°C
OPERATING TEMPERATURE RANGE	$T_{OP}$	- 55 TO + 125									°C

### ELECTRICAL CHARACTERISTICS ( $A_T T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	SM5817 -LFR	SM5818 -LFR	SM5819 -LFR	SM105 -LFR	SM106 -LFR	SM107 -LFR	SM108 -LFR	SM109 -LFR	SM1010 -LFR	UNITS
MAXIMUM FORWARD VOLTAGE AT $I_O$ DC	$V_F$	0.55			0.70		0.79				V
MAXIMUM REVERSE CURRENT AT 25°C	$I_R$	1.0									mA

NOTE : 1. MEASURED AT 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0V D.C.

# RATINGS AND CHARACTERISTIC CURVE SM5817-LFR THRU SM1010-LFR

FIG. 1 - FORWARD CURRENT DERATING CURVE

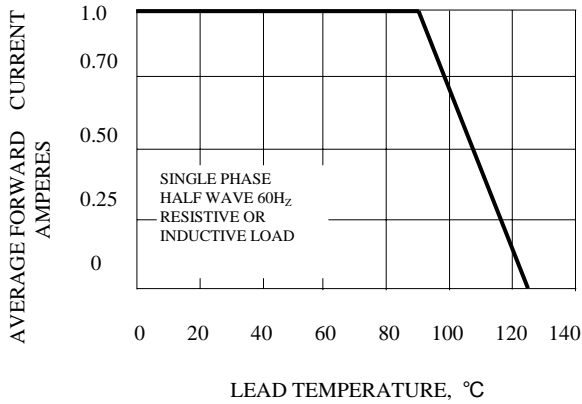


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

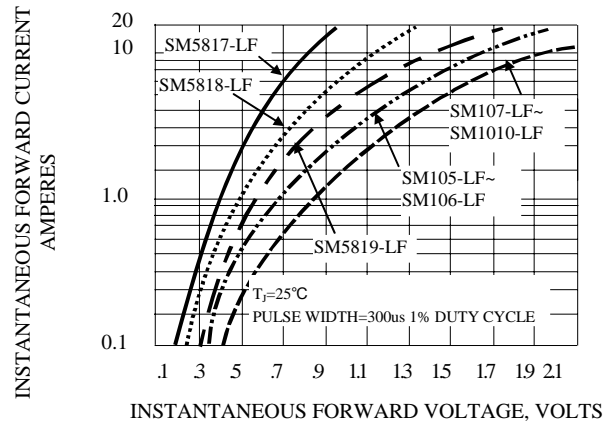


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

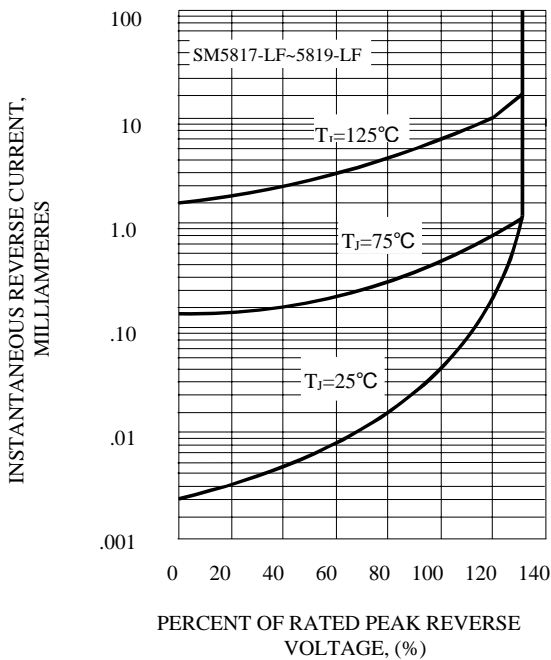


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

