



**SM5817
THRU
SM1010**

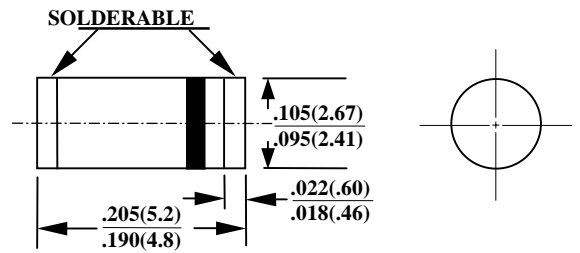
1A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

FEATURES

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

MECHANICAL DATA

- CASE : TRANSFER MOLDED
- TERMINALS : SOLDERABLE PER MIL-STD-750, METHOD 2026
- POLARITY : CATHODE INDICATED BY COLOR BAND
- WEIGHT : 0.135 GRAMS



CASE : MELF
DIMENSIONS IN INCHES AND (MILLIMETERS)

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	SM5818	SM5819	SM105	SM106	SM107	SM108	SM109	SM1010	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 _L =90°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°C UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	SM5817	SM5818	SM5819	SM105	SM106	SM107	SM108	SM109	SM1010	UNITS
MAXIMUM FORWARD VOLTAGE AT I _O DC	V _F	0.45	0.55	0.60	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 THRU SM1010

FIG. 1 - FORWARD CURRENT DERATING CURVE

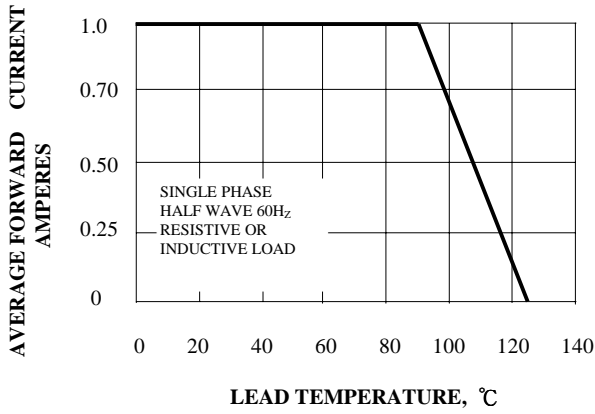


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

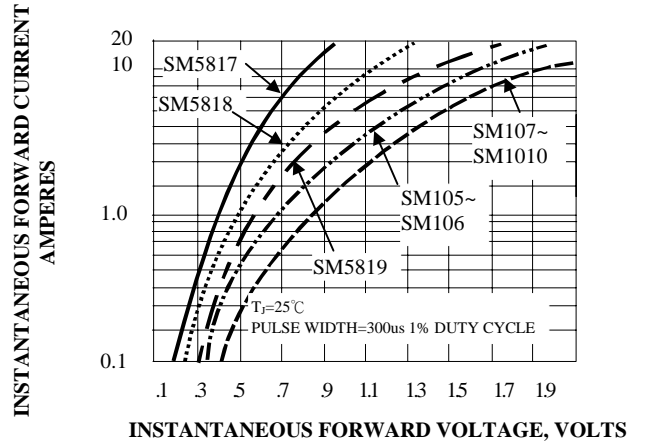


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

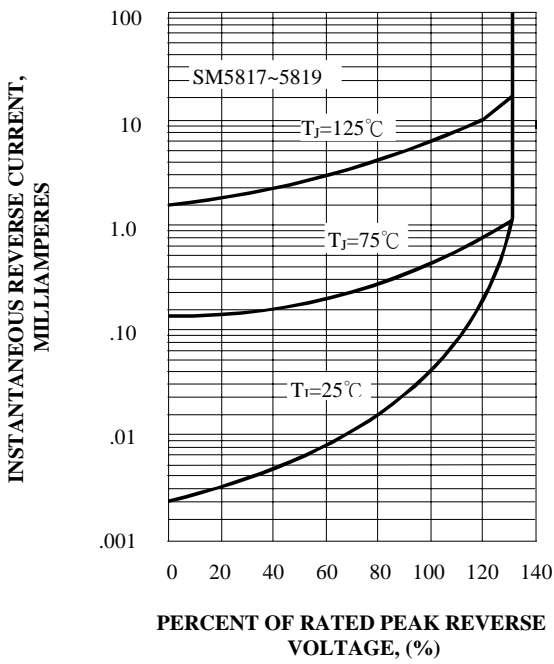


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

