



**SM4001
THRU
SM4007**

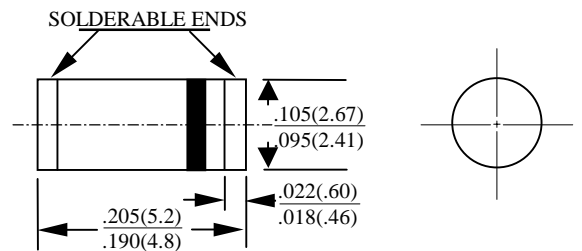
1A SURFACE MOUNT SILICON RECTIFIERS

FEATURES

- GLASS PASSIVATED JUNCTION
- IDEAL FOR SURFACE MOUNTED APPLICATIONS
- LOW LEAKAGE CURRENT

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	SM4001	SM4002	SM4003	SM4004	SM4005	SM4006	SM4007	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	50	100	200	400	600	800	1000	V
MAXIMUM RMS VOLTAGE	V_{RMS}	35	70	140	280	420	560	700	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	50	100	200	400	600	800	1000	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT AT SEE FIG.1	I_O	1.0							A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	30							A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	15							PF
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 175							°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 175							°C

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

CHARACTERISTICS	SYMBOL	SM4001	SM4002	SM4003	SM4004	SM4005	SM4006	SM4007	UNITS
MAXIMUM FORWARD VOLTAGE AT 1.0A	V_F	1.1							V
MAXIMUM DC REVERSE CURRENT	I_R	5							μA

NOTE :

1. MEASURED AT 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 V

RATINGS AND CHARACTERISTIC CURVES SM4001 THRU SM4007

FIG. 1 - FORWARD CURRENT DERATING CURVE

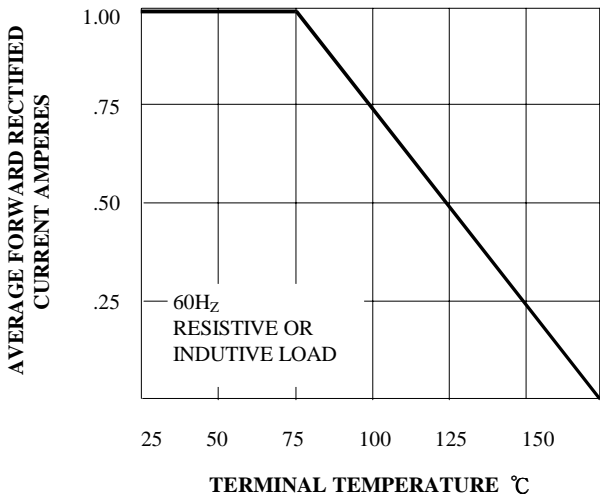


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

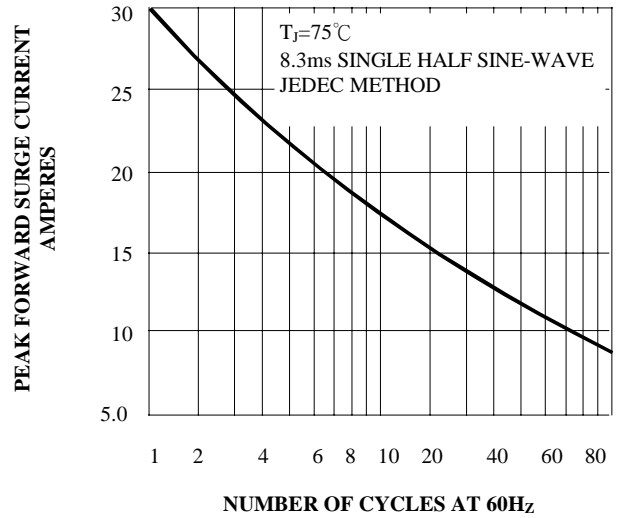


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

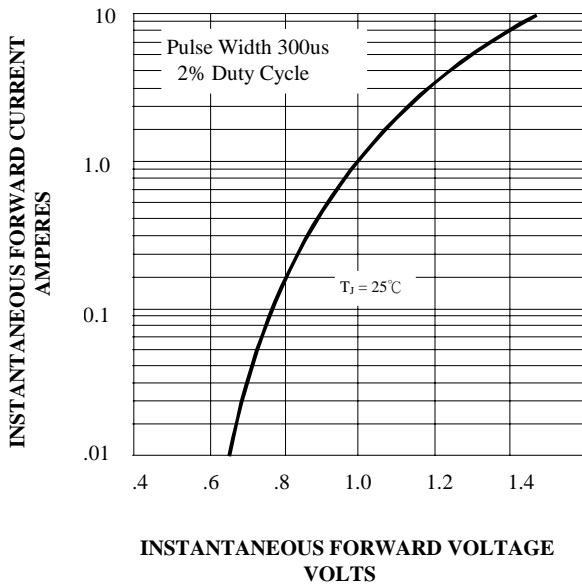


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

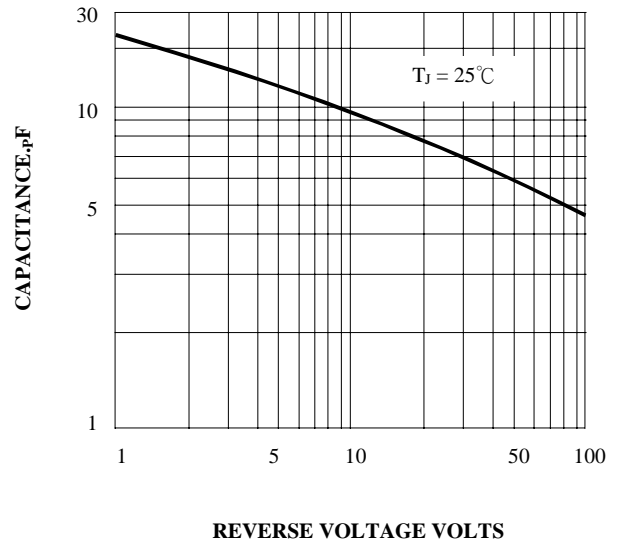


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

