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SURFACE MOUNT FAST RECOVERY PHOTO FLASH RECTIFIER

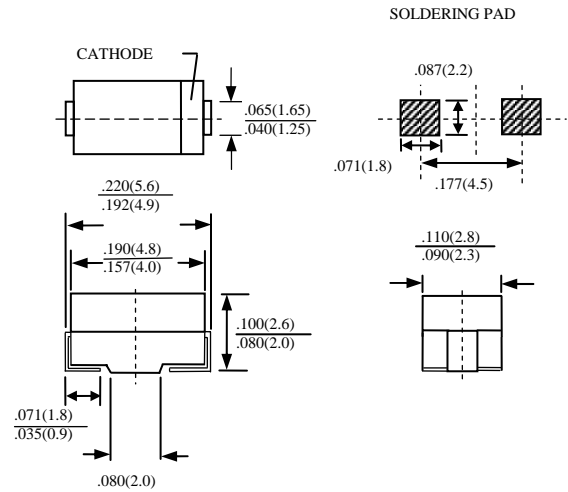
FFM05-10 THRU FFM05-20

FEATURES

- FOR SURFACE MOUNTED APPLICATIONS
- LOW PROFILE PACKAGE
- BUILT-IN STRAIN RELIEF
- EASY PICK AND PLACE
- PLASTIC MATERIAL USED CARRIES UNDERWRITERS LABORATORY CLASSIFICATION 94 V-0
- FAST SWITCHING
- HIGH TEMPERATURE SOLDERING: 250°C/10 SECONDS AT TERMINALS

MECHANICAL DATA

- CASE: MOLDED PLASTIC, DO-214AC (SMA), DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: SOLDER PLATED
- POLARITY: INDICATED BY CATHODE BAND
- WEIGHT: 0.064 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	FFM05-10	FFM05-15	FFM05-16	FFM05-18	FFM05-20	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	1000	1500	1600	1800	2000	V
MAXIMUM RMS VOLTAGE	V_{RMS}	700	1050	1120	1260	1400	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	1000	1500	1600	1800	2000	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT AT $T_L=90^\circ\text{C}$	I_O	0.5					A
MAXIMUM OVERLOAD SURGE, 8.3ms SINGLE HALF SINE-WAVE	I_{FSM}	30					A
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta jL}$	20					$^\circ\text{C/W}$
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	15					PF
STORAGE TEMPERATURE RANGE	T_{STG}	-55 TO + 150					$^\circ\text{C}$
OPERATING TEMPERATURE RANGE	T_{OP}	-55 TO + 125					$^\circ\text{C}$

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

CHARACTERISTICS	SYMBOL	FFM05-10	FFM05-15	FFM05-16	FFM05-18	FFM05-20	UNITS
MAXIMUM FORWARD VOLTAGE AT I_O DC	V_F	2.0					V
MAXIMUM REVERSE CURRENT AT 25°C	I_R	5					μA
MAXIMUM REVERSE RECOVERY TIME (NOTE 3)	T_{RR}	500					nS

- NOTE: 1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
 2. THERMAL RESISTANCE FROM JUNCTION TO AMBIENT AND JUNCTION TO LEAD P.C.B. MOUNTED ON 0.3x0.3" (8.0x8.0mm) COPPER PAD AREAS
 3. REVERSE RECOVERY TEST CONDITIONS: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

RATINGS AND CHARACTERISTICS CURVES FFM05-10 THRU FFM05-20

FIG. 1-MAXIMUM CURRENT DERATING CURVE

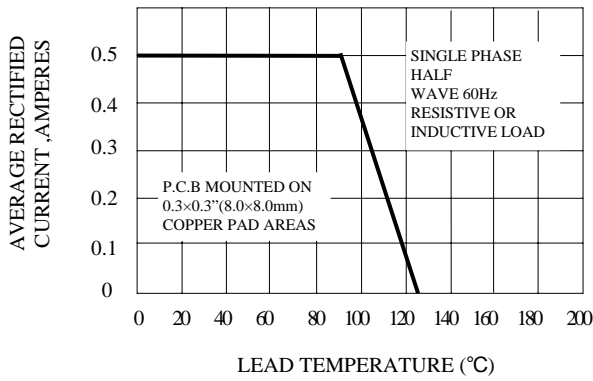


FIG. 2-MAXIMUM FORWARD SURGE VS NUMBER OF CYCLES

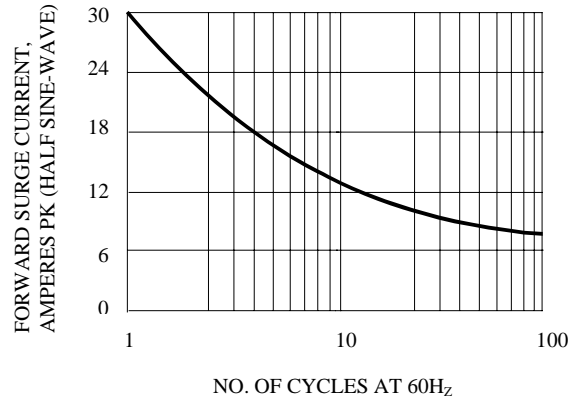


FIG. 3-TYPICAL REVERSE CHARACTERISTICS AT T_J=25°C

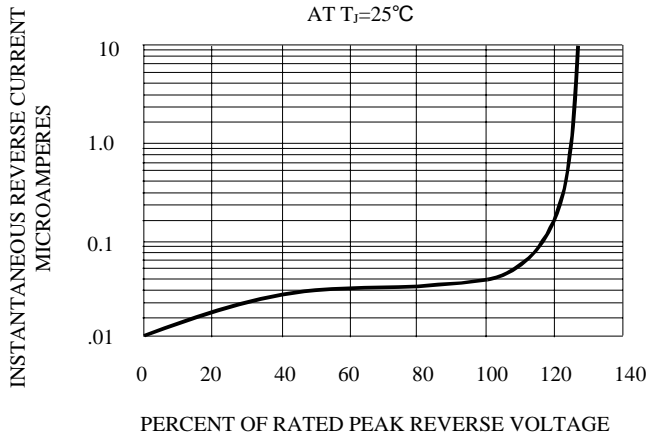


FIG. 4-TYPICAL JUNCTION CAPACITANCE

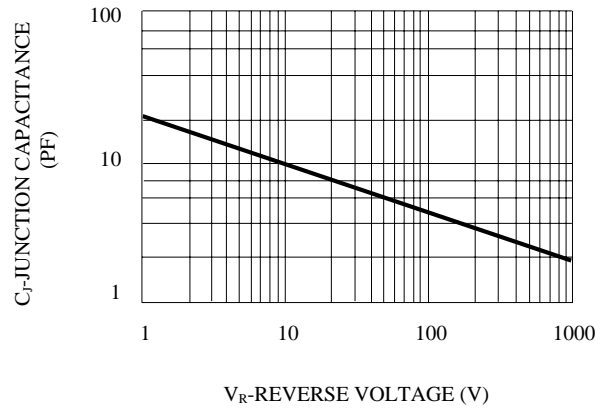


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

