



FV5M-10S SPECIFICATIONS

Rev. A

HIGH VOLTAGE FAST RECOVERY RECTIFIER

A side-view mechanical drawing of a diode. It features a central vertical body with a dark band near the top. Two leads extend from the bottom. Dimension lines with arrows indicate: 'A' as the total length from the top of the body to the bottom of the leads; 'B' as the length of the main body; 'C' as the length of the leads; and 'D' as the diameter of the leads. A cathode symbol (an arrow pointing to a T-bar) is located on the left side of the body.

Value Inch[mm]		
Dim.	Min.	Max.
A	1.030[26.16]	---
B	0.380[9.65]	0.400[10.16]
C	0.091[2.30]	0.106[2.70]
D	0.020[0.51]	0.030[0.76]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. DIFFUSED JUNCTION
3. CASE: FV5M-2 TRANSFER MOLDED
4. DIMENSIONS IN INCHES AND (MILLIMETERS)
5. POLARITY: INDICATED BY CATHODE BAND
6. WEIGHT: FV5M 0.26 GRAMS
7. LEADS: SOLDERABILITY PER MIL-STD-202 METHOD 208
8. RoHS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED STORAGE AND OPERATING TEMPERATURE RANGE -40°C TO +120°C. SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

RATINGS	SYMBOL	VALUE	UNITS
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT, 0.375"(9.5mm) LEAD LENGTH @ 55°C	I_O	0.005	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	0.5	A
TYPICAL JUNCTION CAPACITANCE(NOTE1)	C_J	1	pF
MAXIMUM FORWARD VOLTAGE	V_F	36	V
MAXIMUM REVERSE CURRENT @ 25°C	I_R	5	uA
MAXIMUM REVERSE RECOVERY TIME (NOTE 2)	T_{RR}	100	nS

1. MEASURED @ 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 V
2. REVERSE RECOVERY TEST CONDITIONS: $I_F=2mA$, $I_R=4mA$, $I_{RR}=1mA$
3. MAXIMUM FORWARD VOLTAGE AT I_O DC

PART NUMBER	MAX RECURRENT PK REV VOLTAGE V_{RRM} (V)	MAX RMS VOLTAGE V_{RMS} (V)	MAX DC BLOCKING VOLTAGE V_{DC} (V)
FV5MS-10	10000	7000	10000

RATING AND CHARACTERISTIC CURVES

FIG. 1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

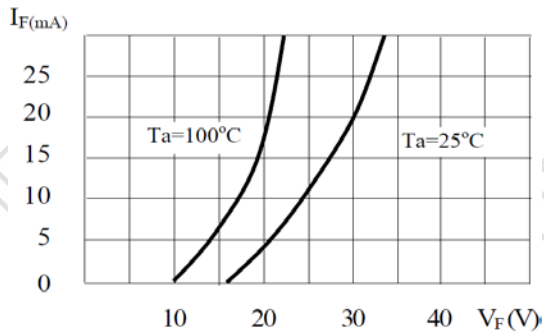


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

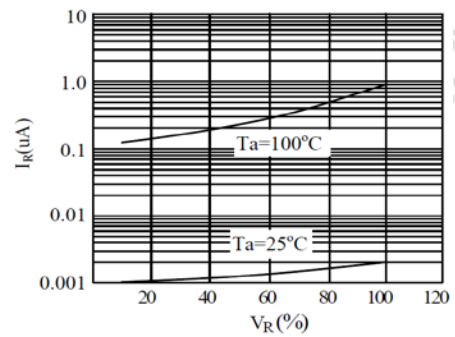


FIG. 3 TYPICAL JUNCTION CAPACITANCE

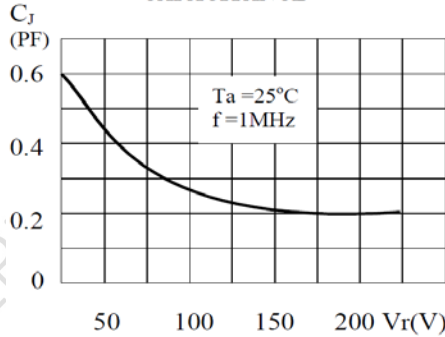


FIG. 4 TYPICAL DISTRIBUTION OF AVALANCHE

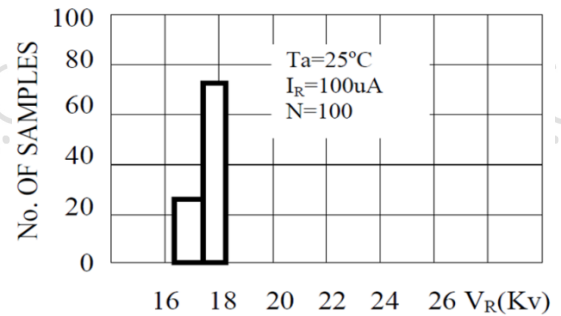


FIG. 5 TYPICAL DISTRIBUTION OF REVERSE RECOVERY TIME

