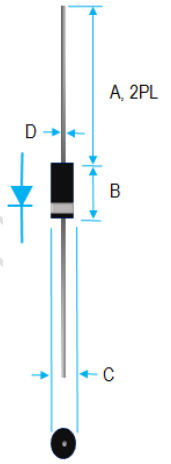
FR02-25 THRU FR02-60 SPECIFICATIONS

Rev. A

FAST RECOVERY HIGH VOLTAGE RECTIFIER



Dim.	Value Inch[mm] DO-41 Min.	Max.
A	1.000[25.40]	---
B	0.166[4.22]	0.205[5.21]
C	0.080[2.03]	0.107[2.72]
D	0.028[0.71]	0.034[0.86]

FR02-25 AND FR02-30: DO-41

Dim.	Value Inch[mm] DO-15 Min.	Max.
A	1.000[25.40]	---
B	0.230[5.84]	0.300[7.62]
C	0.104[2.64]	0.140[3.56]
D	0.028[0.71]	0.034[0.86]

FR02-35 THRU FR02-60: DO-15

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. FAST RECOVERY TIMES
3. DESIGNED FOR PHOTO FLASH APPLICATION
4. BEVELED ROUND CHIP, AVALANCHE OPERATION
5. CASE: DO-41/DO-15 TRANSFER MOLDED
6. DIMENSIONS IN INCHES AND (MILLIMETERS)
7. POLARITY: INDICATED BY CATHODE BAND
8. WEIGHT: DO-41 0.34 GRAMS / DO-15 0.40 GRAMS
9. LEADS: SOLDERABILITY PER MIL-STD-202 METHOD 208
10. RoHS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED STORAGE AND OPERATING TEMPERATURE RANGE -65°C TO +125°C. SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

RATINGS	SYMBOL	VALUE	UNITS
AVERAGE FORWARD RECTIFIED CURRENT AT L=10mm TA=55°C	I_O	0.2	A
MAXIMUM REVERSE CURRENT @ 25°C, VDC	I_R	5	uA
MAXIMUM REVERSE RECOVERY TIME	T_{RR}	500	nS
NON-REPETITIVE PEAK FORWARD SURGE CURRENT, 8.3ms HALF SINE-WAVE	I_{FSM}	25 (FR02-25 to -45) 20 (FR02-50 to -60)	A
TYPICAL JUNCTION CAPACITANCE(NOTE1)	C_J	6 (FR02-25 to -40) 4 (FR02-45 to -60)	pF

1: I_{FSM} @ NOM-REPETITIVE PEAK FORWARD SURGE CURRENT, 8.3ms HALF SINE-WAVE

2. MAXIMUM FORWARD VOLTAGE @ I_o

3. DO-41 FOR FR02-25 THRU FR02-30, DO-15 FOR FR02-35 THRU FR02-60

PART NUMBER	MAX RECURRENT PK REV VOLTAGE V_{RRM} (V)	MAX RMS VOLTAGE V_{RMS} (V)	MAX DC BLOCKING VOLTAGE V_{DC} (V)	MAX FWD VOLTAGE V_F (V)
FR02-25	2500	1750	2500	6
FR02-30	3000	2100	3000	6
FR02-35	3500	2450	3500	8
FR02-40	4000	2800	4000	8
FR02-45	4500	3150	4500	12
FR02-50	5000	3500	5000	12
FR02-60	6000	4200	6000	12

RATING AND CHARACTERISTIC CURVES

FIG. 1-MAXIMUM CURRENT RATING
EFFECT OF COPPER AREA.
RESISTIVE/INDUCTIVE LOAD

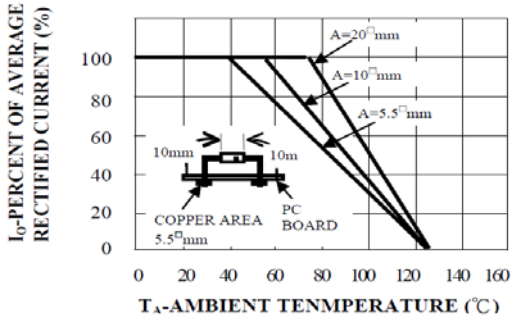


FIG. 2-MAXIMUM CURRENT RATING
CAPACITIVE LOAD,
10mm LEAD LENGTHS

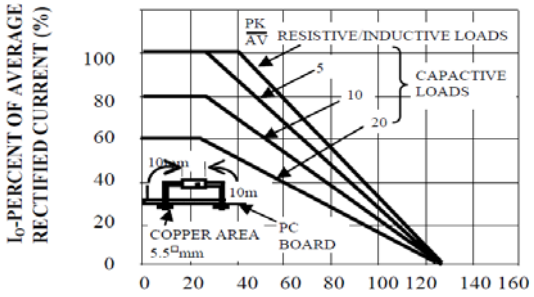


FIG. 3-MAXIMUM CURRENT RATING
EFFECT OF COPPER AREA.
RESISTIVE/INDUCTIVE LOAD

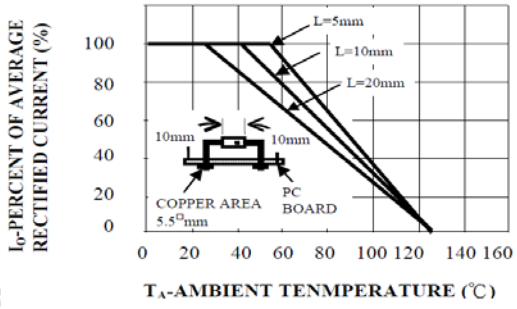


FIG. 4-TYPICAL REVERSE CHARCTERISTICS
AT T_J=25℃

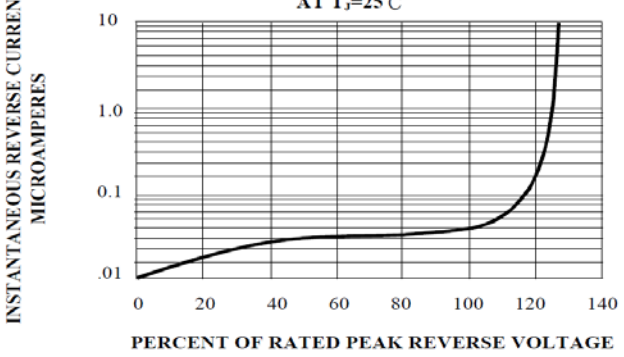


FIG. 5-MAXIMUM FORWARD SURGE
VS NUMBER OF CYCLES

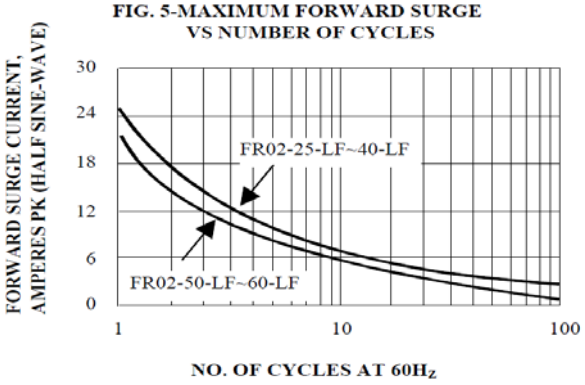


FIG. 6-TYPICAL JUNCTION CAPACITANCE

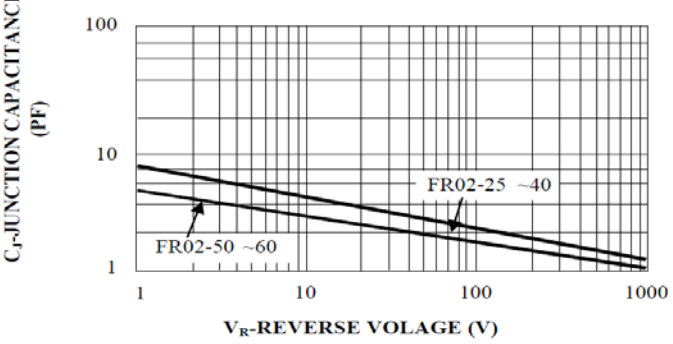


FIG. 7-TYPICAL FORWARD
CHARACTERISTICS