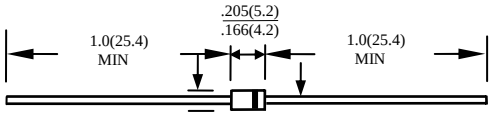
Frontier Electronics Corp.

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FAST RECOVERY HIGH VOLTAGE RECTIFIER

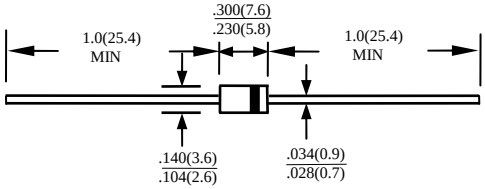
FR02-25 THRU FR02-60



CASE: DO-41
FR02-25~FR02-30

FEATURES

- FAST RECOVERY TIMES
- UL 94V0 FLAME RETARDANT EPOXY MOLDING COMPOUND
- LOW COST
- DESIGNED FOR PHOTO FLASH APPLICATION
- BEVELED ROUND CHIP, AVALANCHE OPERATION



CASE: DO-15
FR02-35~FR02-60

MECHANICAL DATA

- CASE: TRANSFER MOLDED, DIMENSIONS IN INCHES AND (MILLIMETERS)
- LEADS: SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY: CATHODE INDICATED BY COLOR BAND
- WEIGHT: 0.34 GRAMS (DO-41)
  0.40 GRAMS (DO-15)

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	FR02-25	FR02-30	FR02-35	FR02-40	FR02-45	FR02-50	FR02-60	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	2500	3000	3500	4000	4500	5000	6000	V
MAXIMUM RMS VOLTAGE	V_{RMS}	1750	2100	2450	2800	3150	3500	4200	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	2500	3000	3500	4000	4500	5000	6000	V
AVERAGE FORWARD RECTIFIED CURRENT AT L=10mm T_A=55°C	I_O	0.2							A
NOM-REPETITIVE PEAK FORWARD SURGE CURRENT, 8.3ms HALF SINE-WAVE	I_{FSM}	25					20		A
TYPICAL JUNCTION CAPACITANCE	C_J	6				4			PF
STORAGE TEMPERATURE RANGE	T_{STG}	-65 TO + 150							℃
OPERATING TEMPERATURE RANGE	T_{OP}	-65 TO + 125							℃

ELECTRICAL CHARACTERISTICS (A_T T_A =25°C UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	FR02-25	FR02-30	FR02-35	FR02-40	FR02-45	FR02-50	FR02-60	UNITS
MAXIMUM FORWARD VOLTAGE AT Io DC	V_F	6.0		8.0		12.0			V
MAXIMUM REVERSE CURRENT AT 25℃	I_R	5.0							μA
TYPICAL REVERSE RECOVERY TIME	T_{RR}	500							nS

RATINGS AND CHARACTERISTICS CURVES FR02-25 THRU FR02-60

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

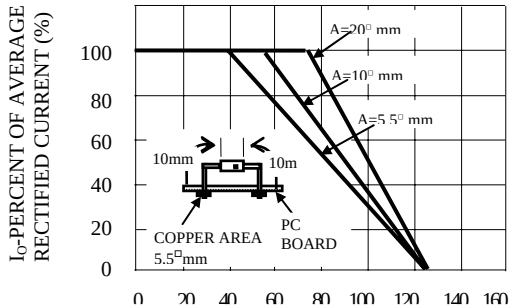


FIG. 2-MAXIMUM CURRENT RATING
CAPACITIVE LOAD,
10mm LEAD LENGTHS

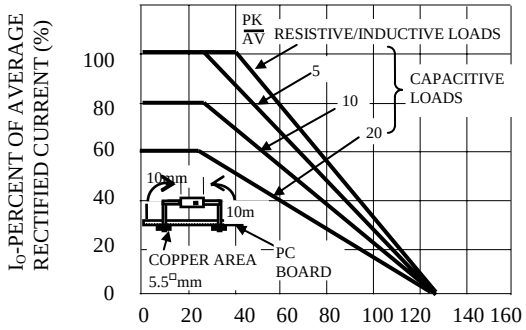


FIG. 3-MAXIMUM CURRENT RATING
EFFECT OF COPPER AREA.
RESISTIVE/INDUCTIVE LOAD

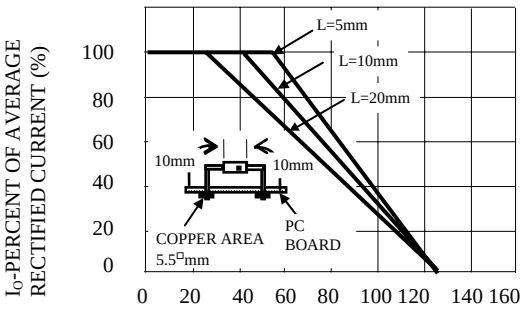


FIG. 4-TYPICAL REVERSE CHARACTERISTICS
AT T_J=25℃

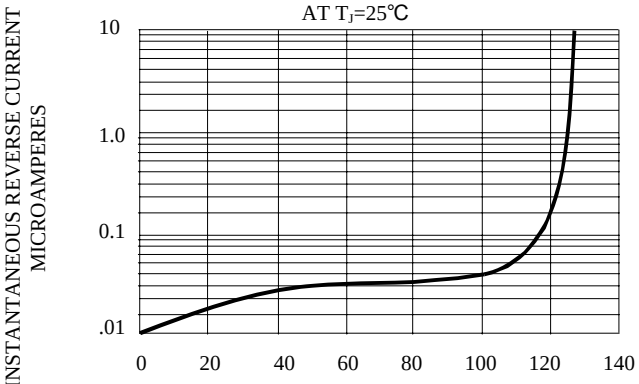


FIG. 5-MAXIMUM FORWARD SURGE
VS NUMBER OF CYCLES

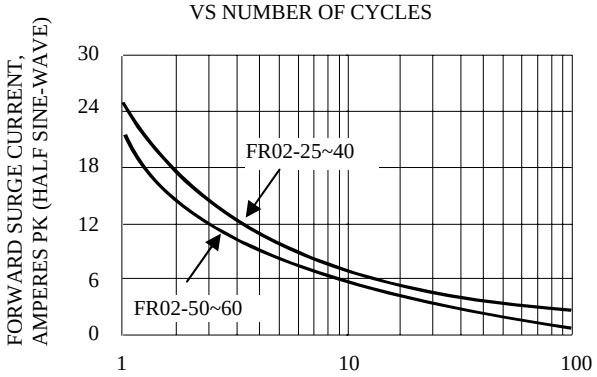


FIG. 6-TYPICAL JUNCTION CAPACITANCE

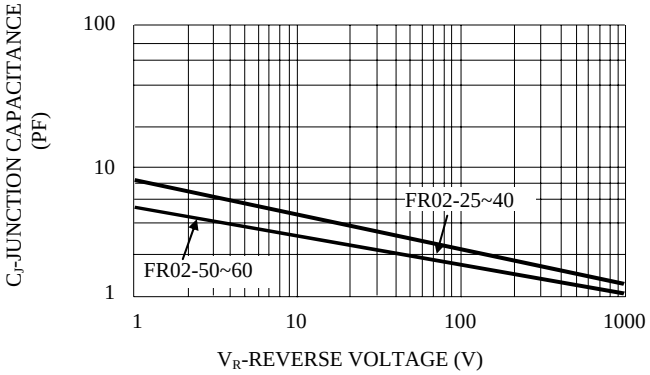


FIG. 7-TYPICAL FORWARD
C CHARACTERISTICS

