

**SURFACE MOUNT GLASS PASSIVATED
FAST RECOVERY SILICON RECTIFIER**
VOLTAGE RANGE 50 to 600 Volts CURRENT 1.0 Ampere

FEATURES

- * Glass passivated device
- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * Mounting position: Any
- * Weight: 0.057 gram

MECHANICAL DATA

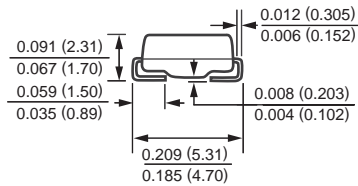
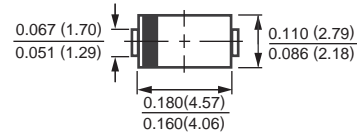
- * Epoxy : Device has UL flammability classification 94V-0

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%.



DO-214AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	FM4933	FM4934	FM4935	FM4936	FM4937	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	Volts
Maximum Average Forward Rectified Current at TA = 55°C	I _O	1.0					Amps
Peak Forward Surge Current I _{FM} (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30					Amps
Typical Current Squared Time	i ² t	3.7					A ² S
Maximum Thermal Resistance	(Note 2) R _{θJL}	30					°C/W
	(Note 3) R _{θJA}	70					°C/W
Typical Junction Capacitance (Note 1)	C _J	15					pF
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150					°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	FM4933	FM4934	FM4935	FM4936	FM4937	UNITS
Maximum Forward Voltage at 1.0A DC	V _F	1.2					Volts
Maximum Full Load Reverse Current, Full cycle Average at TA = 55°C	I _R	50					uAmps
Maximum Average Reverse Current at @TA = 25°C		5.0					uAmps
Rated DC Blocking Voltage @TA = 125°C		100					uAmps
Maximum Reverse Recovery Time (Note 4)	t _{rr}	200					nSec

- NOTES : 1. Measured at 1.0 MHz and applied average voltage of 4.0VDC
 2. Thermal resistance junction to terminal 6.0mm² copper pads to each terminal.
 3. Thermal resistance junction to ambient, 6.0mm² copper pads to each terminal.
 4. Test Conditions: I_F = 1.0A, V_R = 30V.

RATING AND CHARACTERISTIC CURVES (FM4933 THRU FM4937)

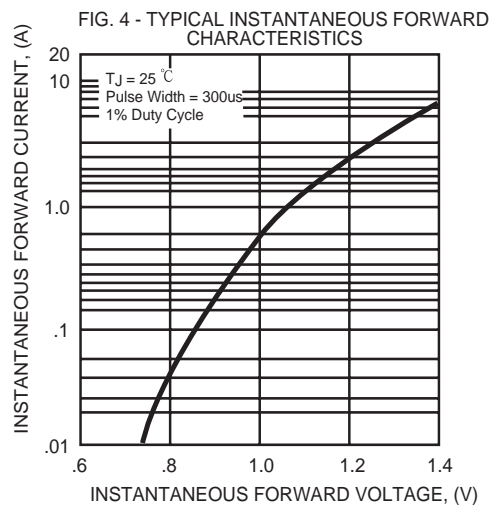
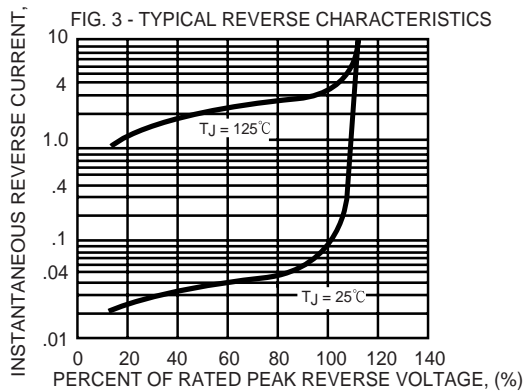
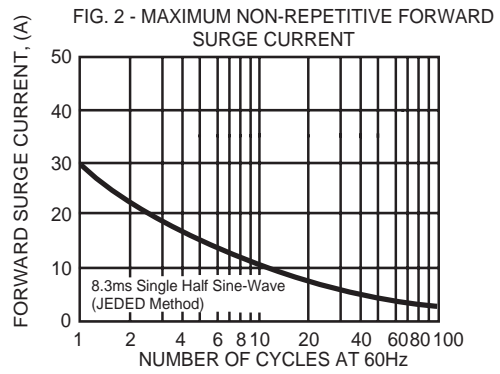
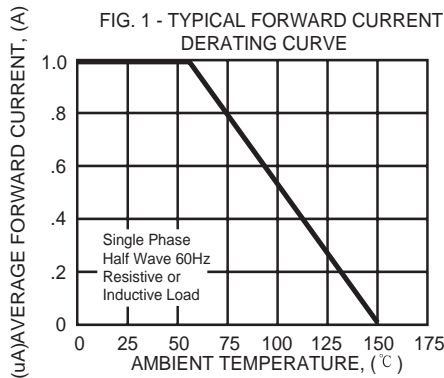
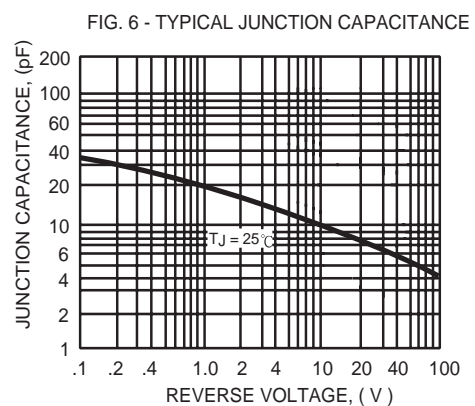
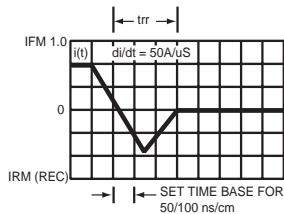
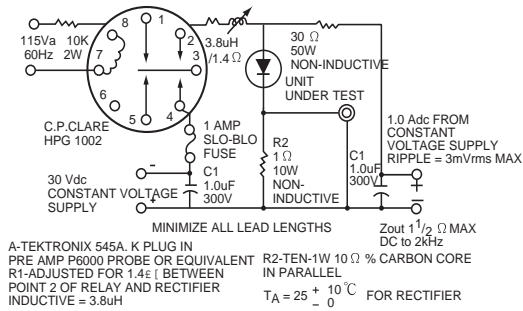
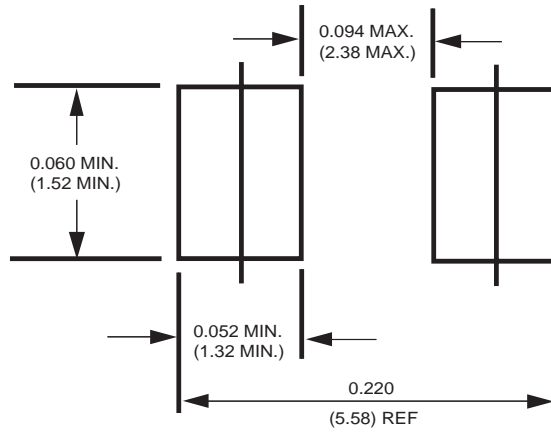


FIG. 5 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

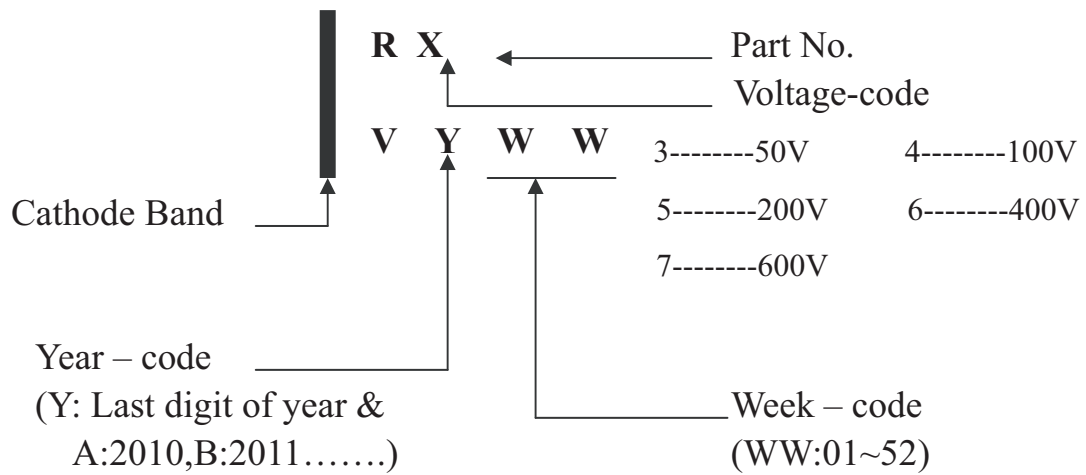


Mounting Pad Layout



Dimensions in inches and (millimeters)

Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMA	-W	7,500	15,000	---	---	330	360*355*360	120,000	15.2

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMA	-T	2,000	8,000	---	---	178	390*205*310	64,000	7.8