



CHENMKO ENTERPRISE CO.,LTD

SILICON RECTIFIER

VOLTAGE RANGE 1200 - 2000 Volts CURRENT 0.2 to 0.5 Ampere

R1200FPT
THRU
R2000FPT

Lead free devices

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Fast switching
- * Low leakage
- * High current capability
- * High surge capability
- * High reliability

MECHANICAL DATA

Case: JEDEC DO-41 molded plastic

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

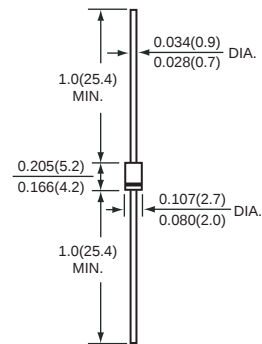
Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.35 gram



DO-41



Dimensions in inches and (millimeters)

DO-41

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

RATINGS	SYMBOL	R1200FPT	R1500FPT	R1800FPT	R2000FPT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	1200	1500	1800	2000	Volts
Maximum RMS Voltage	VRRM	840	1050	1260	1400	Volts
Maximum DC Blocking Voltage	VDC	1200	1500	1800	2000	Volts
Maximum Average Forward Rectified Current at TA = 50°C	IO	500			200	mAmps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30				Amps
Operating and Storage Temperature Range	TJ, TSTG	-65 to +175				°C

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

CHARACTERISTICS	SYMBOL	R1200FPT	R1500FPT	R1800FPT	R2000FPT	UNITS
Maximum Instantaneous Forward Voltage at 0.5A/0.2A DC	VF	2.5			4.0	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage TA = 25°C	IR	5.0				uAmps
Maximum Full Load Reverse Current Average, Full Cycle 0.375" (9.5mm) lead length at TL = 75°C		100				uAmps
Maximum Reverse Recovery Time (NOTE)	trr	500				nS

NOTES : Test Conditions : IF = 0.5 A, IR = -1.0 A, IRR = -0.25 A

2001-6

RATING CHARACTERISTIC CURVES (R1200FPT THRU R2000FPT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

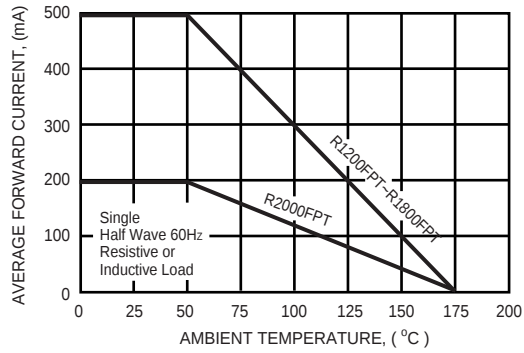


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

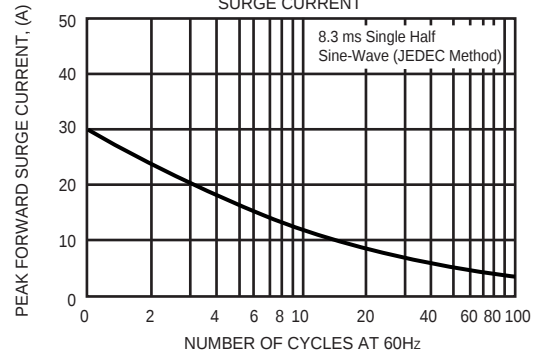
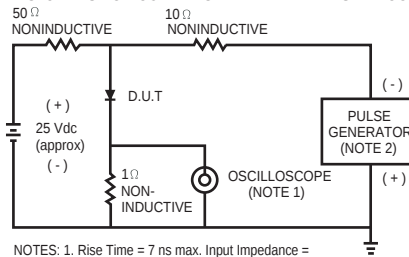


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. Rise Time = 7 ns max. Input Impedance = 1 megohm, 22 pF.
2. Rise Time = 10 ns max. Source Impedance = 50 ohms.

