



CHENMKO ENTERPRISE CO.,LTD

**PR1000FPT
THRU
PR1800FPT**

PHOTOFLASH RECTIFIER

VOLTAGE RANGE 1000 - 1800 Volts CURRENT 0.1 Ampere

Lead free devices

FEATURES

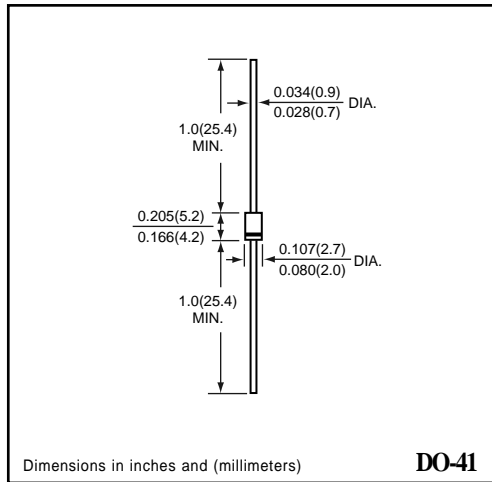
- * Fast switching
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * High surge capability
- * High reliability

MECHANICAL DATA

Case: JEDEC DO-41 molded plastic body
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



DO-41

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%.

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

| RATINGS | SYMBOL | PR1000FPT | PR1200FPT | PR1400FPT | PR1600FPT | PR1800FPT | UNITS | |
|---|---------|-------------|-----------|-----------|-----------|-----------|-------|------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 1000 | 1200 | 1400 | 1600 | 1800 | Volts | |
| Maximum RMS Voltage | VRMS | 700 | 840 | 980 | 1120 | 1260 | Volts | |
| Maximum DC Blocking Voltage | Vdc | 1000 | 1200 | 1400 | 1600 | 1800 | Volts | |
| Maximum Average Forward Rectified Current at TA = 55°C | Io | 0.1 | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 20 | | | | | | Amps |
| Typical Junction Capacitance (Note 1) | CJ | 10 | | | | | | pF |
| Operating and Storage Temperature Range | TJ,TSTG | -65 to +175 | | | | | | °C |

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

| CHARACTERISTICS | SYMBOL | PR1000FPT | PR1200FPT | PR1400FPT | PR1600FPT | PR1800FPT | UNITS | |
|---|--------|-----------|-----------|-----------|-----------|-----------|-------|-------|
| Maximum Instantaneous Forward Voltage at 0.1 A DC | VF | 1.5 | | | | | | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage at TA = 25°C | IR | 5.0 | | | | | | uAmps |
| Maximum Full Load Reverse Current Average, Full Cycle 0.375" (9.5mm) lead length at TL = 55°C | | 100 | | | | | | uAmps |
| Maximum Reverse Recovery Time (Note 2) | trr | 300 | | | | | | nSec |

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
 2. Test Conditions : IF = 0.5 A, IR = -1.0 A, IRR = -0.25 A

RATING CHARACTERISTIC CURVES (PR100FPT THRU PR1800FPT)

FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

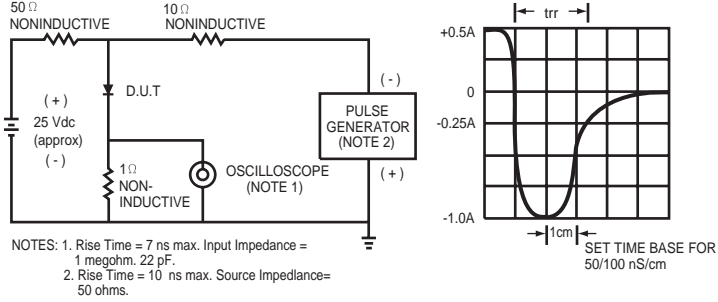


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

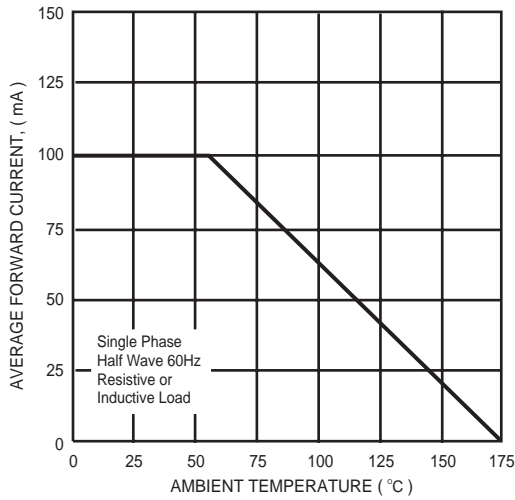


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

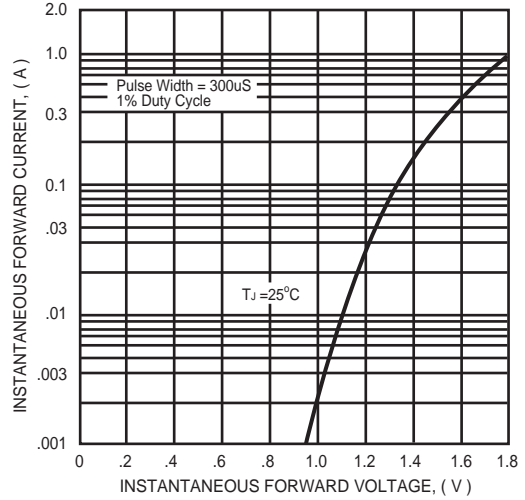


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

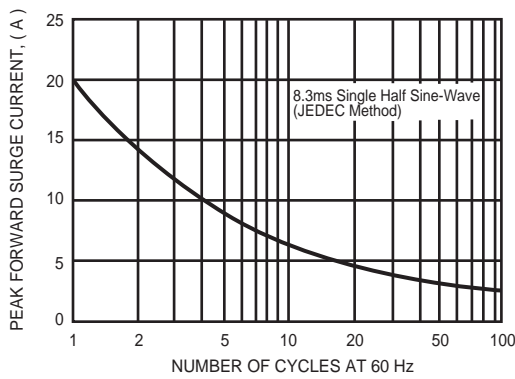


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

