



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

HIGH EFFICIENCY RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 2.0 Amperes

UF2001PT
THRU
UF2007PT

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low power loss, high efficiency
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * High surge capability
- * High speed switching
- * High reliability

MECHANICAL DATA

Case: JEDEC DO-15 molded plastic

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

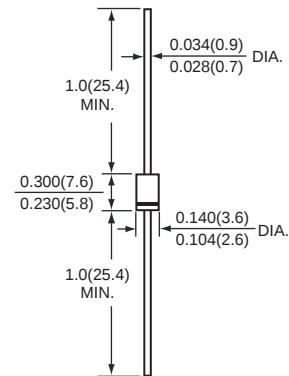
Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.38 gram



DO-15



Dimensions in inches and (millimeters)

DO-15

MAXIMUM RATINGS (At $T_A = 25^{\circ}\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	UF2001P	UF2002PT	UF2003PT	UF2004PT	UF2005PT	UF2006PT	UF2007PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length $T_A = 55^{\circ}\text{C}$	I_o	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60							Amps
Typical Junction Capacitance (Note 1)	C_J	30					17		pF
Maximum Thermal Resistance (Note 2)	$R_{\theta JL}$	12							$^{\circ}\text{C} / \text{W}$
	$R_{\theta JA}$	40							$^{\circ}\text{C} / \text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^{\circ}\text{C}$ unless otherwise noted)

CHARACTERISTICS		SYMBOL	UF2001P	UF2002PT	UF2003PT	UF2004PT	UF2005PT	UF2006PT	UF2007PT	UNITS
Maximum Instantaneous Forward Voltage at 2.0 A DC		V _F	1.0			1.3		1.7		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A = 25°C	I _R	10							uAmps
	T _A = 125°C		50							uAmps
Maximum Reverse Recovery Time (Note 3)		t _{rr}	50				75			nSec

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
2. Thermal Resistance from Junction to Ambient, and from junction to lead length 0.375" (9.5mm) P.C.B. mounted.
3. Test Conditions : $I_F = 0.5 \text{ A}$, $I_R = -1.0 \text{ A}$, $I_{RR} = -0.25 \text{ A}$

2001-6

RATING CHARACTERISTIC CURVES (UF2001PT THRU UF2007PT)

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

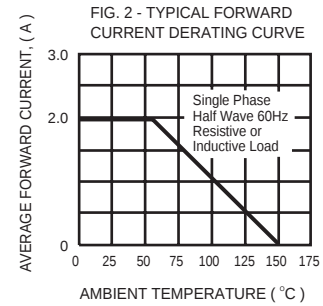
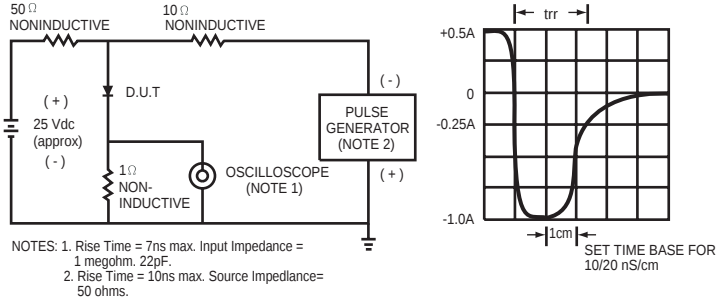


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

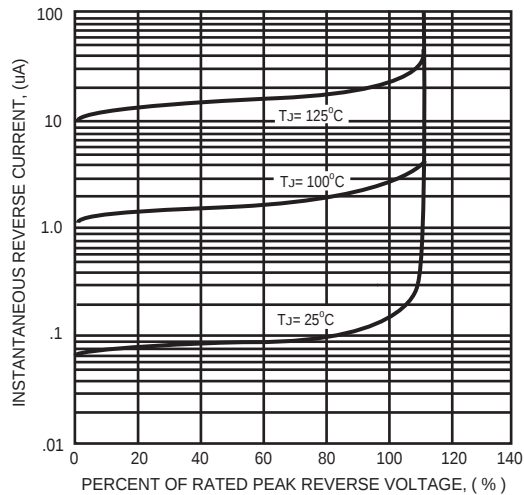


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

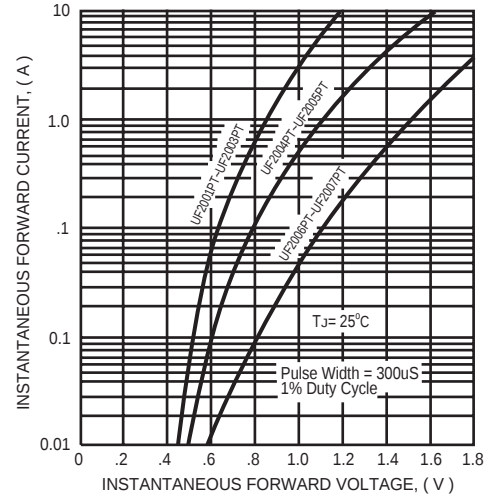


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

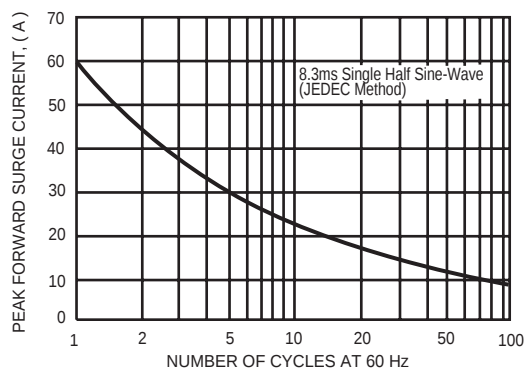


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

