CHENMKO ENTERPRISE CO.,LTD

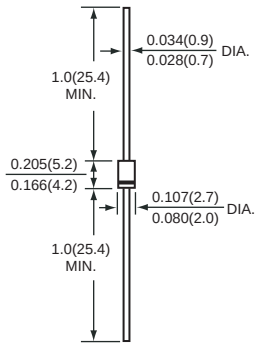
GLASS PASSIVATED
JUNCTION PLASTIC RECTIFIER
VOLTAGE RANGE 50 - 1000 Volts CURRENT 1.0 Ampere

1N4001GPT
THRU
1N4007GPT

Lead free devices

FEATURES
* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
* High reliability
* Low cost
* Low leakage
* Low forward voltage drop
* High current capability
* Glass passivated junction

DO-41



Dimensions in inches and (millimeters) DO-41

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: 0.33 gram

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 RATINGES (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	1N4001GPT	1N4002GPT	1N4003GPT	1N4004GPT	1N4005GPT	1N4006GPT	1N4007GPT	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 at T_A = 75°C	I_O	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							Amps
Typical Junction Capacitance (Note)	C_J	15							pF
Typical Thermal Resistance	$R_{\theta JA}$	50							°C / W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175							°C

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

CHARACTERISTICS		SYMBOL	1N4001GPT	1N4002GPT	1N4003GPT	1N4004GPT	1N4005GPT	1N4006GPT	1N4007GPT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC		V_F	1.1							Volts
Maximum Reverse Current at rated DC blocking Voltage per leg	@ T_A = 25°C	I_R	5.0							uAmps
	@ T_A = 100°C		50							uAmps
Maximum Full Load Reverse Current Average, Full Cycle 0.375" (9.5mm) lead length at T_L = 75°C			30							uAmps

NOTES : Measured at 1.0 MHz and applied reverse voltage of 4.0 volts

2001-6

RATING CHARACTERISTIC CURVES (1N4001GPT THRU 1N4007GPT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

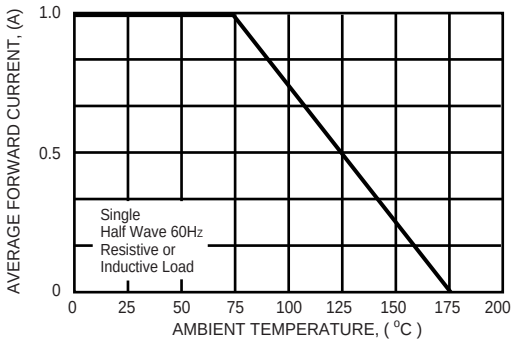


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

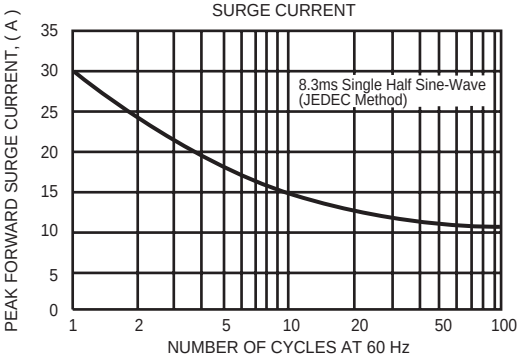


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

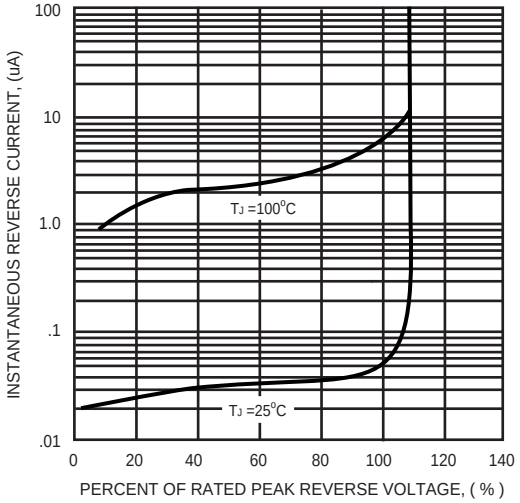


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

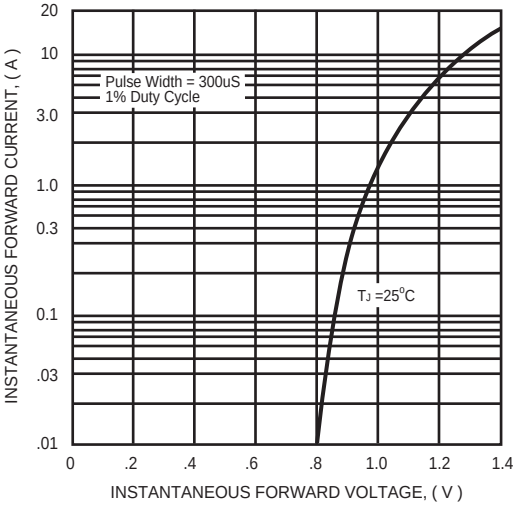


FIG. 5 - TYPICAL JUNCTION CAPACITANCE