DEC

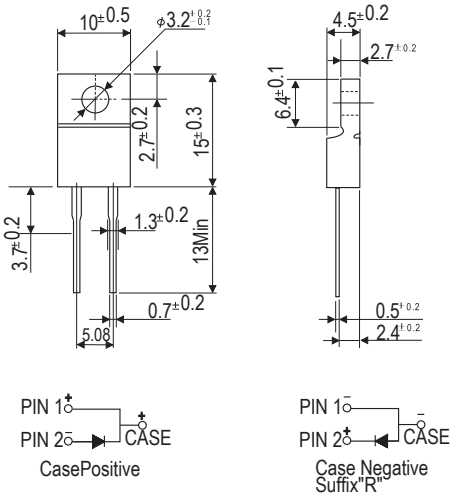
HEP1601 THRU HEP1606

CURRENT 16.0 Amperes
VOLTAGE 50 to 600 Volts

Features

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

ITO-220A



Dimensions in inches and (millimeters)

Mechanical Data

- Case : JEDEC ITO-220A molded plastic body
- Terminals : Lead solderable per MIL-STD-750, method 2026
- Polarity : As marked
- Mounting Position : Any
- Weight : 0.08 ounce, 2.24 gram

Maximum Ratings And Electrical Characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

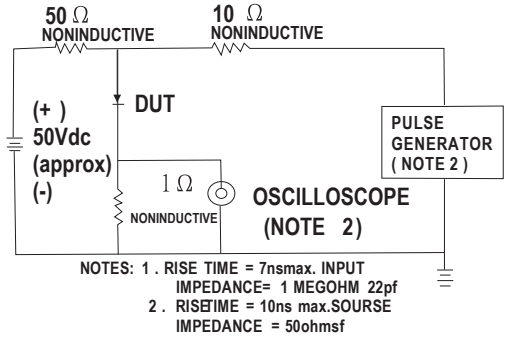
	Symbols	HEP 1601	HEP 1602	HEP 1603	HEP 1604	HEP 1605	HEP 1606	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	300	400	600	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	420	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	600	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length @ at T_A=100℃	$I_{(AV)}$	8.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	125						Amps
Maximum instantaneous forward voltage at 8.0A	V_F	1.0				1.3	1.7	Volts
Maximum DC reverse current at rated DC blocking voltage T_A=25℃	I_R	10.0						μA
Maximum DC reverse current at rated DC blocking voltage T_A=125℃		100						
Maximum reverse recovery time (Note 1)	Trr	50					80	ns
Typical junction capacitance (Note 2)	C_J	80					50	pF
Typical thermal resistance (Note 3)	$R\theta_{JC}$	2.2						℃/W
Operating junction and storage temperature range	T_J T_{STG}	-55 to +150 -55 to +150						℃

Notes:
(1) Test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.
(2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.
(3) Thermal resistance from junction to case mounting on heatsink.

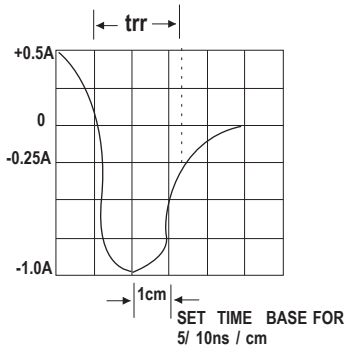
DEC

RATINGS AND CHARACTERISTIC CURVES HEP1601 THRU HEP1606

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



NOTES: 1 . RISE TIME = 7nsmax. INPUT
IMPEDANCE= 1 MEGOHM 22pf
2 . RISETIME = 10ns max.SOURSE
IMPEDANCE = 50ohmsf



SET TIME BASE FOR
5/ 10ns / cm

FIG . 2 -MAXIMUM AVERAGE FORWARD CURRENT DERATING CURVE

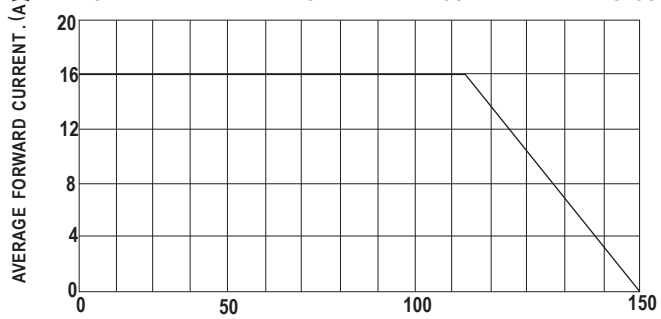


FIG . 3 -TYPICAL REVERSE CHARACTERISTICS

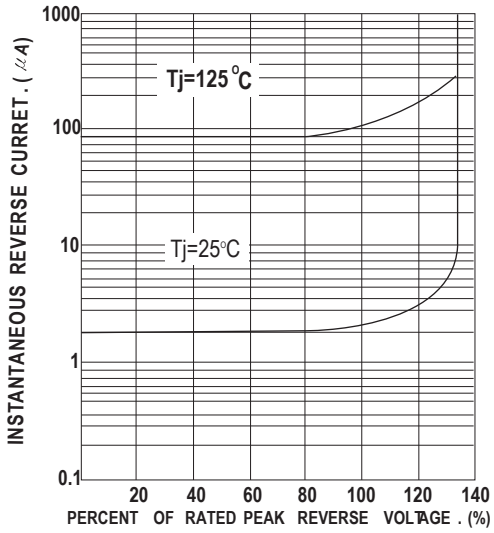


FIG . 4 -MAXIMUM NON - REPETITIVE FORWARD SURGE CURRENT

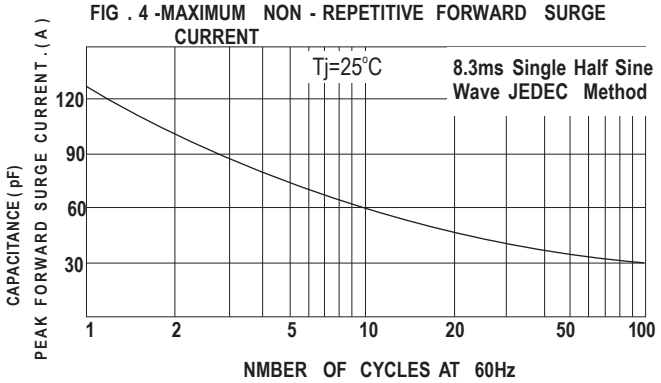


FIG . 5 -TYPICAL JUNCTIOON CAPACITANCE PER LEG

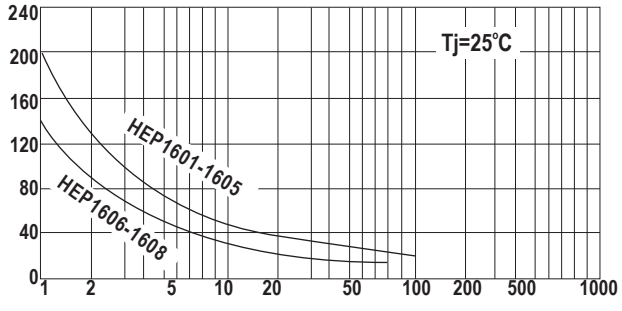


FIG . 6 -TYPICAL FRWARD CHARACTERISTICS

