DATA SHEET

HER1601CT SERIES

DUAL ULTRA FAST RECOVERY RECTIFIERS

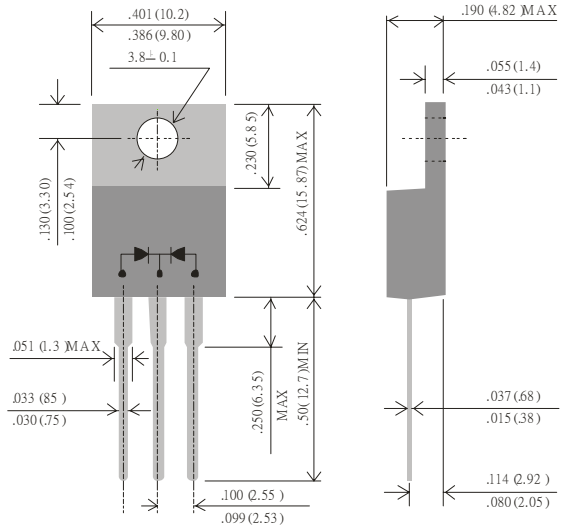
VOLTAGE **50~400 Volts** **CURRENT** **16.0 Ampere**

FEATURES

- ULTRA FAST RECOVERY TIME
- LOW FORWARD VOLTAGE
- LOW THERMAL RESISTANCE
- HIGH CURRENT CAPABILITY
- HIGH VOLTAGE
- GLASS PASSIVATED CHIP JUNCTION

MECHANICAL DATA

- CASE：TRANSFER MOLDED
- TERMINAL：MIL-STD-202F METHOD 208
- POLARITY：AS MARKED
- EPOXY：UL94V-0 FLAME RETARDANT MOLDING COMPOUND
- WEIGHT：2.26GRAMS



CASE：TO-220AB

DIMENSIONS IN INCHES AND (MILLIMETERS)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

RATINGS AT 25℃ AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.

PARAMETER	SYMBOL	HER 1601CT	HER 1602CT	HER 1603CT	HER 1605CT	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	50	100	200	400	V
MAXIMUM RMS VOLTAGE	V_{RMS}	35	70	140	280	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	50	100	200	400	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT (SEE FIG.1)	I_O	16.0				A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	125				A
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JA}$	2				℃/W
STORAGE TEMPERATURE RANGE	T_{STG}	-55 TO + 150				℃
OPERATING TEMPERATURE RANGE	T_J	-55 TO + 150				℃

ELECTRICAL CHARACTERISTICS (A_T T_A =25℃ UNLESS OTHERWISE NOTED)

PARAMETER		SYMBOL	HER 1601CT	HER 1602CT	HER 1603CT	HER 1605CT	UNITS
MAXIMUM FORWARD VOLTAGE AT 16A		V_F	1.0			1.3	V
MAXIMUM DC REVERSE CURRENT	25℃	I_R	10				μA
	100℃		500				
TYPICAL JUNCTION CAPACITANCE (NOTE 1)		C_J	170				pF
MAXIMUM REVERSE RECOVERY TIME (NOTE 3)		T_{RR}	50				

NOTE: 1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. THERMAL RESISTANCE JUNCTION TO CASE PER LEG MOUNTED ON HEATSINK
3. REVERSE RECOVERY TEST CONDITIONS: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

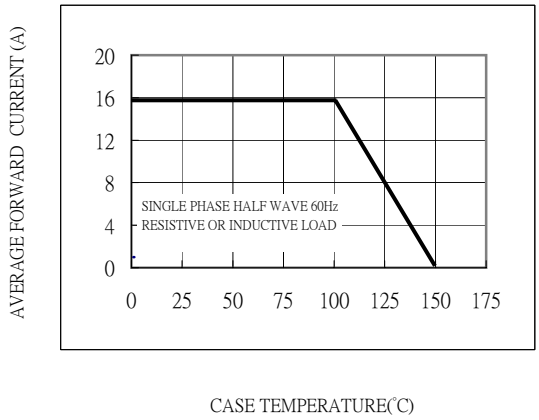


Fig.1-TYPICAL FORWARD CURRENT DERATING CURVE

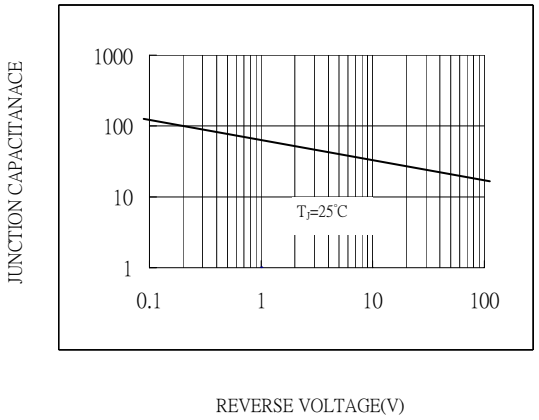


Fig.2-TYPICAL JUNCTION CAPACITANCE

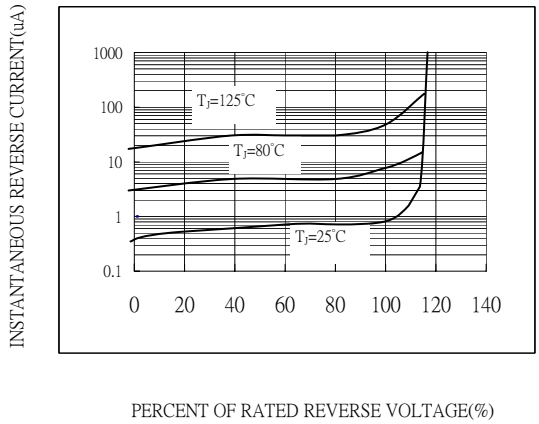


Fig.3-TYPICAL REVERSE CHARACTERISTICS

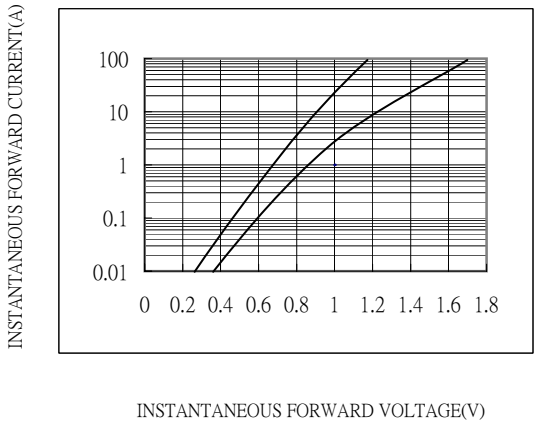


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS