



Features

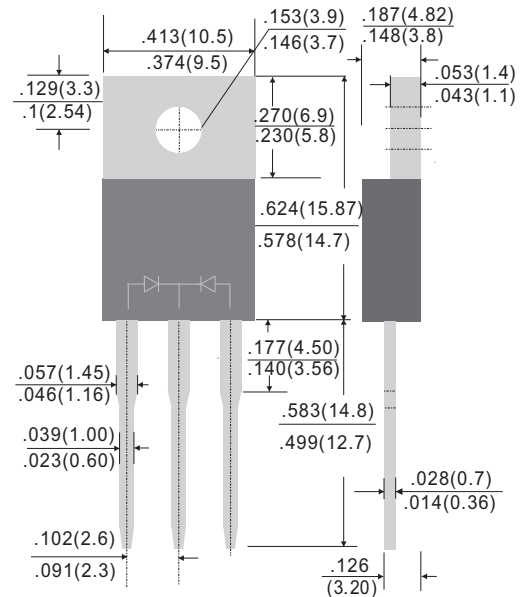
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- High speed switching
- AEC-Q101 qualified
- **Moisture Sensitivity Level 1**
- **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"



Mechanical Date

- Case: TO-220
- Case Material: Molded Plastic. UL
Flammability Classification Rating 94V-0
- Terminals: Lead Free Plating (Tin Finish).
Solderable per MIL-STD-202, Method 208
- Weight: 1.948 grams (approximate)

TO-220



Dimensions in inches and (millimeters)

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

PARAMETER	SYMBOL	HER16 01C	HER16 02C	HER16 03C	HER16 04C	HER16 05C	HER16 06C	HER16 07C	HER16 08C	UNIT	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	300	400	600	800	1000	V	
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	420	560	700	V	
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	600	800	1000	V	
Maximum average forward rectified current (Total) (Per Leg)	I_F	16.0 8.0								A	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	125.0								A	
Maximum Instantaneous Forward Voltage IF=8A @ 25°C	V_F	1.00			1.35		1.70			V	
Maximum DC Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=100°C	I_R	10 100								uA mA	
Typical Junction Capacitance(NOTE1)	C_j	75								pF	
Maximum Reverse Recovery Time(NOTE2)	T_{rr}	50						75			ns
Typical Thermal Resistance	$R_{\theta JC}$	3								°C/W	
Operating Temperature Range	T_J	-55 to +150								°C	
Storage Temperature Range	T_{STG}	-55 to +150								°C	

NOTES:1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC
2.Measured with IF=0.5A, IR=1A, IRR=0.25A



FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

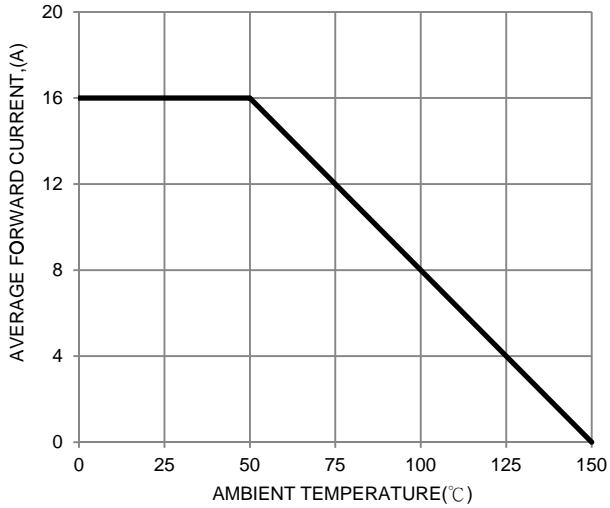


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

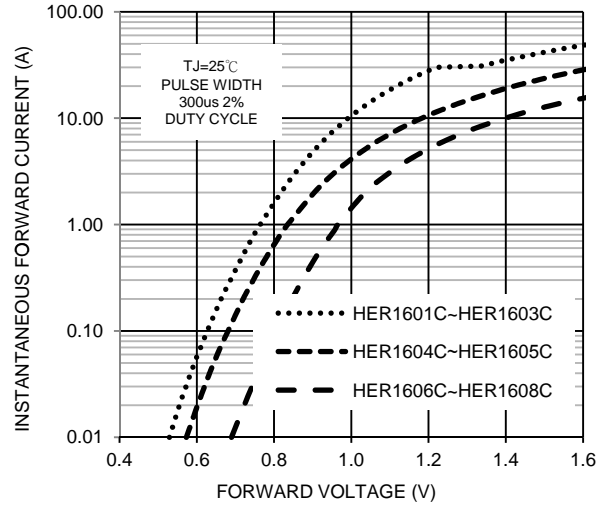


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

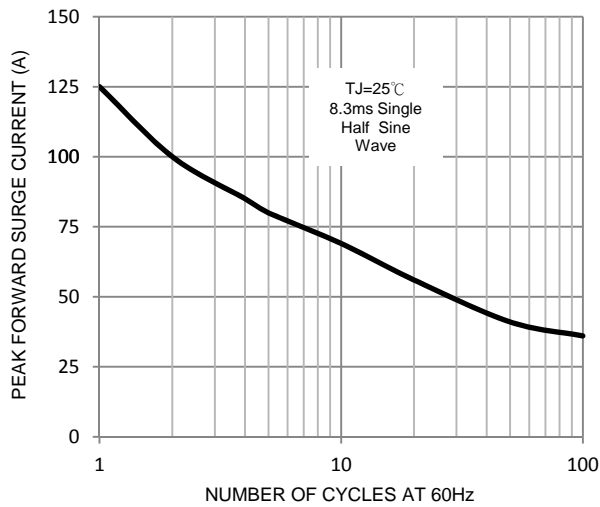


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

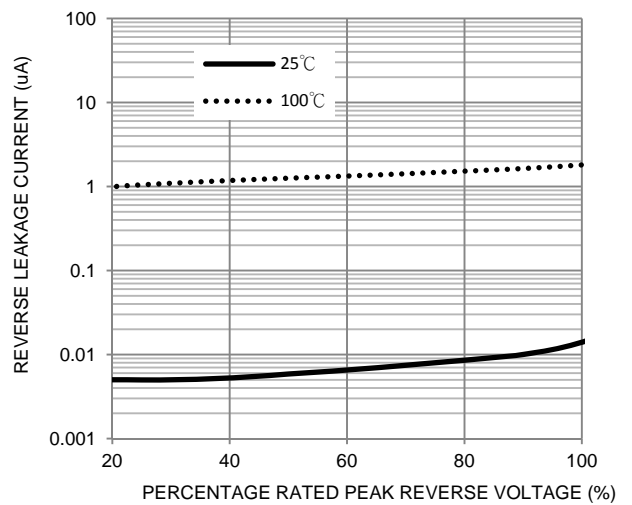


FIG. 5-TYPICAL JUNCTION CAPACITANCE

