

Pb Free Plating Product

H16C20A/H16C30A/H16C40A/H16C50A/H16C60A

16.0 Ampere Heatsink Common Anode Ultra Fast Recovery Rectifiers

Features

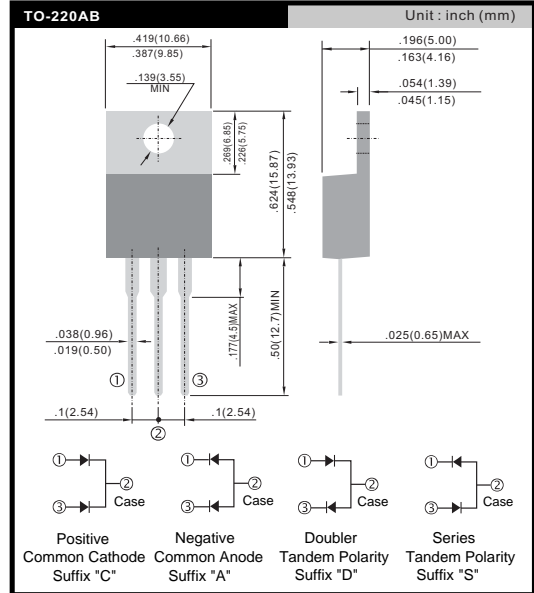
- * Fast switching for high efficiency
- * Low forward voltage drop
- * High current capability
- * Low reverse leakage current
- * High surge current capability

Application

- * Automotive Inverters and Solar Inverters
- * Plating Power Supply, SMPS and UPS
- * Car Audio Amplifiers and Sound Device Systems

Mechanical Data

- * Case: Heatsink TO-220AB open package
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solderable per MIL-STD-202 method 208
- * Polarity: As marked on diode body
- * Mounting position: Any
- * Weight: 2.2 gram approximately



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	SYMBOL	H16C20A	H16C30A H16C40A	H16C50A H16C60A	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	200	400	600	V
Maximum RMS Voltage	V _{RMS}	140	280	420	V
Maximum DC Blocking Voltage	V _{DC}	200	400	600	V
Maximum Average Forward Rectified Current T _c =100 (Total Device 2x8A=16A)	I _{F(AV)}	16.0			A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	175	150		A
Maximum Instantaneous Forward Voltage @ 8.0 A (Per Diode/Per Leg)	V _F	0.98	1.3	1.7	V
Maximum DC Reverse Current @T _J =25 At Rated DC Blocking Voltage @T _J =125	I _R		5.0 100		μA μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}		35		nS
Typical junction Capacitance (Note 2)	C _J		90		pF
Typical Thermal Resistance (Note 3)	R _{θJC}		1.5		°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to + 150			°C

NOTES : (1) Reverse recovery test conditions I_F= 0.5A, I_R= 1.0A, I_{rr} = 0.25A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

(3) Thermal Resistance junction to case.

FIG.1 - FORWARD CURRENT DERATING CURVE

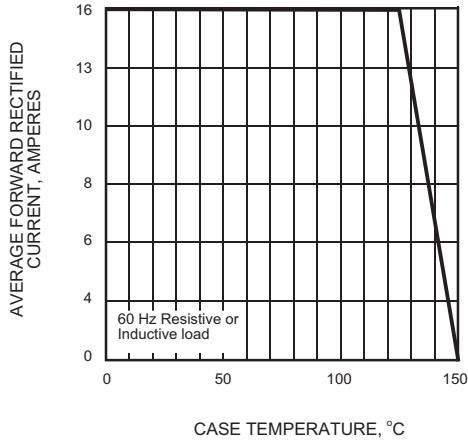


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

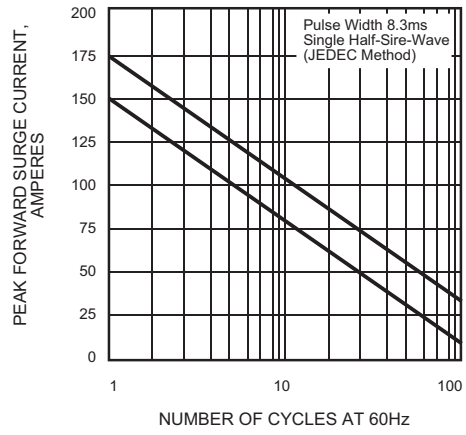


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

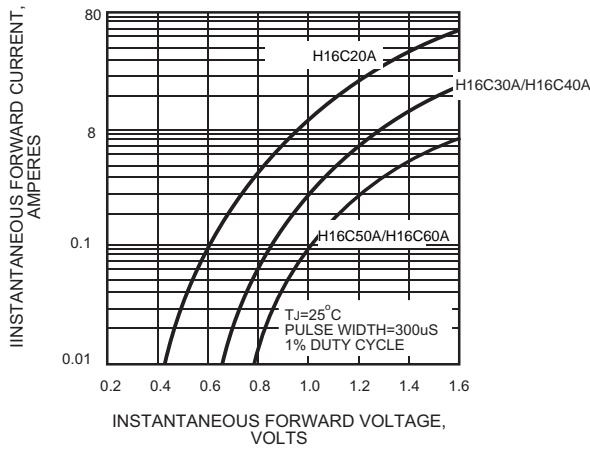


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

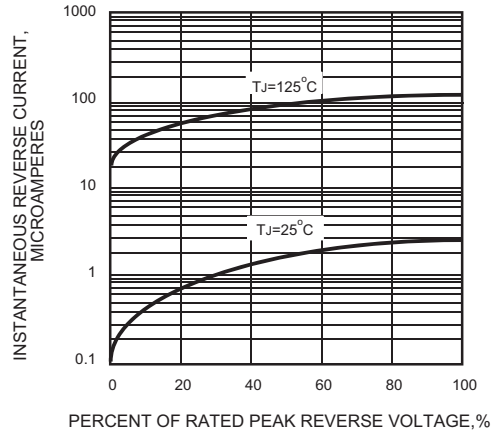


FIG.5 - TYPICAL JUNCTION CAPACITANCE

