

Pb Free Plating Product

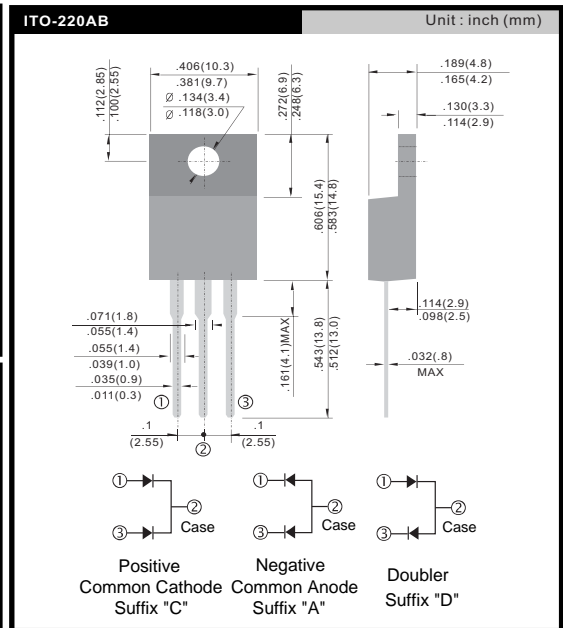
URF1620C thru URF1660C



16.0 Ampere Insulated Common Cathode Ultrafast Recovery Rectifier

- Features**
- \* Fast switching for high efficiency
  - \* Low forward voltage drop
  - \* High current capability
  - \* Low reverse leakage current
  - \* High surge current capability
- Application**
- \* Automotive Environment(Inverter/Converter)
  - \* Plating Power Supply, SMPS and UPS
  - \* Car Audio Amplifier and Sound Device System

- Mechanical Data**
- \* Case: Molded plastic Isolated/Insulated ITO-220AB
  - \* 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: 2.03 grams



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

	SYMBOL	URF1620C URF1620A URF1620D	URF1640C URF1640A URF1640D	URF1660C URF1660A URF1660D	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	200	400	600	V
Maximum RMS Voltage	VRMS	140	280	420	V
Maximum DC Blocking Voltage	VDC	200	400	600	V
Maximum Average Forward Rectified Current Tc=100°C	IF(AV)	16.0			A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	175	150		A
Maximum Instantaneous Forward Voltage @ 8.0 A	VF	0.98	1.3	1.7	V
Maximum DC Reverse Current @Tj=25°C At Rated DC Blocking Voltage @Tj=125°C	IR	10.0			uA
		250			uA
Maximum Reverse Recovery Time (Note 1)	Trr	35			nS
Typical junction Capacitance (Note 2)	Cj	90			pF
Typical Thermal Resistance (Note 3)	RθJC	2.2			°CW
Operating Junction and Storage Temperature Range	Tj, TSTG	-55 to + 150			°C

NOTES : (1) Reverse recovery test conditions IF = 0.5A, R= 1.0A, Irr = 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

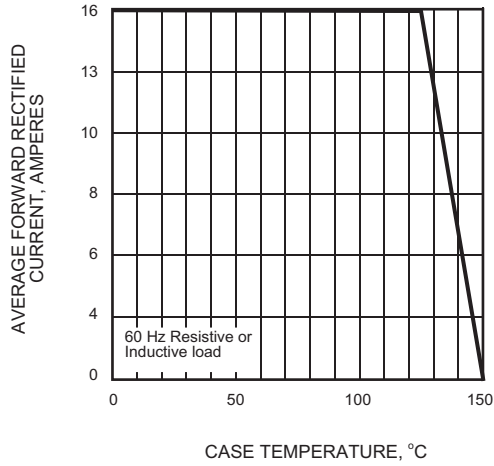


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

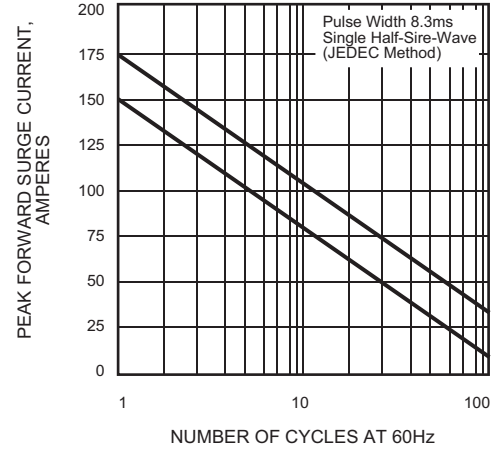


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

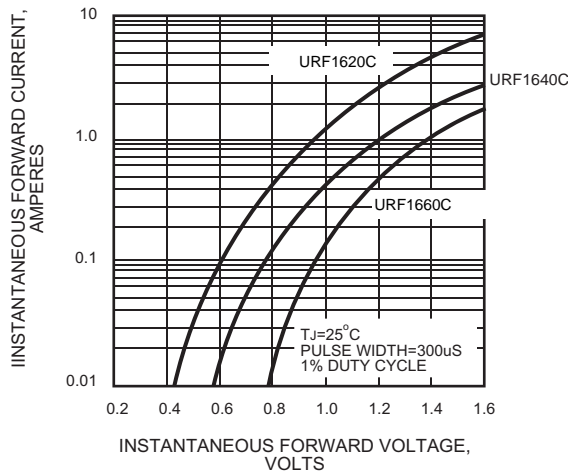


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

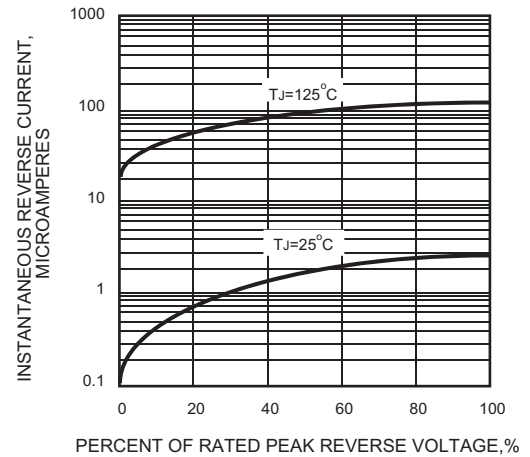


FIG.5 - TYPICAL JUNCTION CAPACITANCE

