

Pb Free Plating Product

URF1605 thru URF1660



16.0 Amp. Isolated Glass Passivated Junction Ultrafast Recovery Rectifiers

Features

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

Application

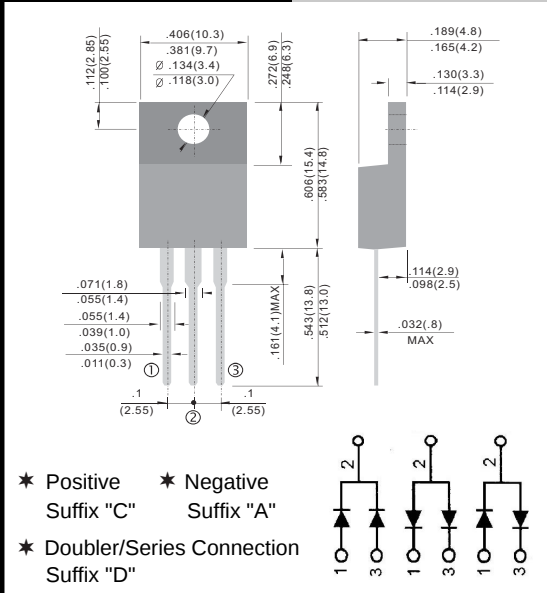
- * Automotive Environment|DC Motor Control
- * Plating Power Supply|UPS
- * Amplifier and Sound Device System etc..

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: Color band denotes cathode
- * Mounting position: Any
- * Weight: 2.03 grams

ITO-220AB

Unit : inch (mm)



- * Positive Suffix "C"
- * Negative Suffix "A"
- * Doubler/Series Connection Suffix "D"

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%.

Common Cathode Suffix "C" Common Anode Suffix "A" Anode and Cathode Coexistence Suffix "D"	SYMBOL	URF1605C URF1605A URF1605D	URF1610C URF1610A URF1610D	URF1620C URF1620A URF1620D	URF1630C URF1630A URF1630D	URF1640C URF1640A URF1640D	URF1660C URF1660A URF1660D	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	V
Maximum Average Forward Rectified Current T _c =100°C	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	V _F	0.98			1.3	1.7		V
Maximum DC Reverse Current @T _J =25°C At Rated DC Blocking Voltage @T _J =125°C	I _R	10.0 250						uA uA
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}	2.2						°CW
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to + 150						°C

NOTES : (1) Reverse recovery test conditions I_F = 0.5A, 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

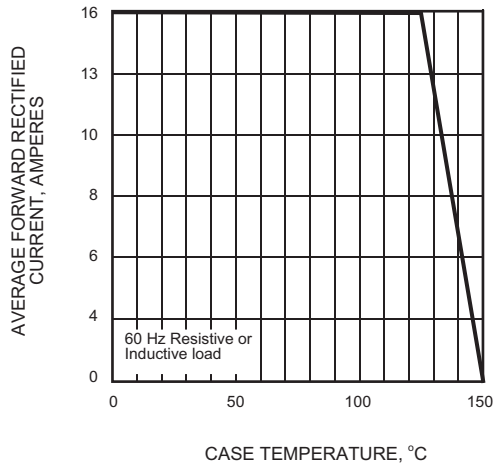


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

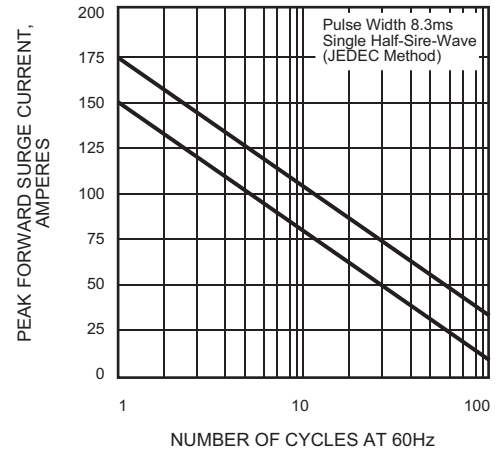


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

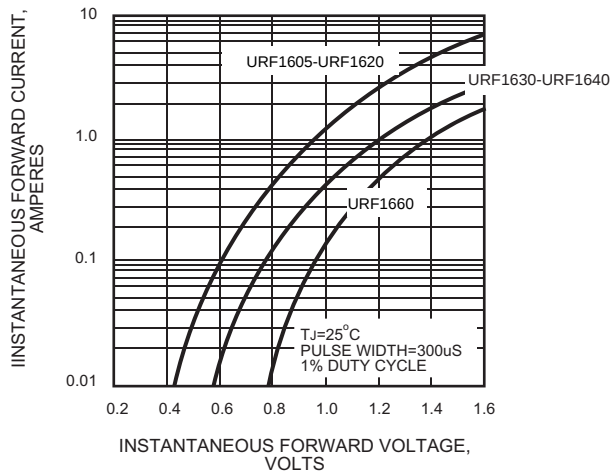


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

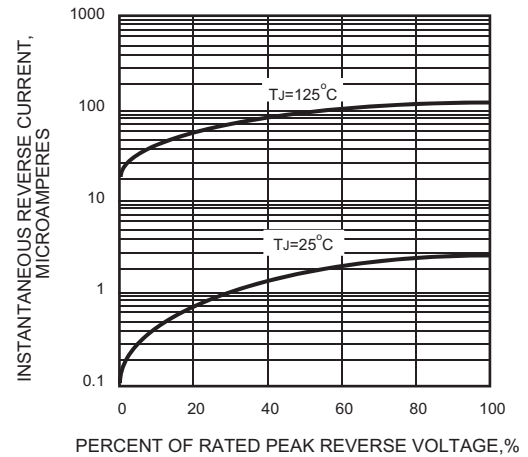


FIG.5 - TYPICAL JUNCTION CAPACITANCE

