



# Frontier Electronics Corp.

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## 1.5A BRIDGE RECTIFIERS

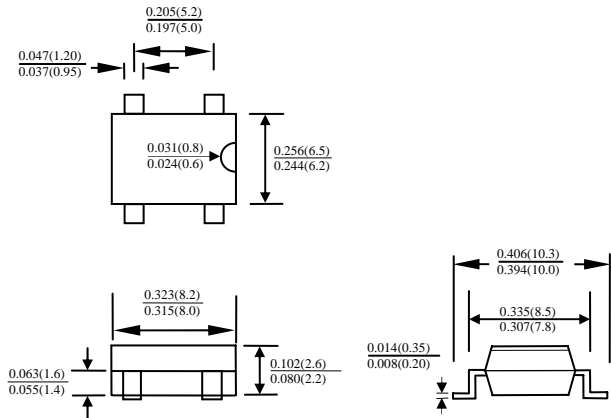
### DF15005S THRU DF1510S

#### FEATURES

- PLASTIC MATERIAL USED CARRIES UNDERWRITERS LABORATORY RECOGNITION 94V-0
- GLASS PASSIVATED CHIP
- IDEAL FOR PRINTED CIRCUIT BOARD
- HIGH TEMPERATURE SOLDERING GUARANTEED: 260°C/10S AT 5 LBS., (2.3KG) TENSION

#### MECHANICAL DATA

- CASE: MOLDED PLASTIC, DFSS, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: LEAD SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY: POLARITY SYMBOLS MARKED ON BODY
- MOUNTING POSITION: ANY
- WEIGHT: 0.38 GRAMS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

RATINGS	SYMBOL	DF	DF	DF	DF	DF	DF	DF	DF	UNITS
		15005S	1501S	1502S	1504S	1506S	1508S	1510S		
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	$V_{RRM}$	50	100	200	400	600	800	1000		V
MAXIMUM RMS VOLTAGE	$V_{RMS}$	35	70	140	280	420	560	700		V
MAXIMUM DC BLOCKING VOLTAGE	$V_{DC}$	50	100	200	400	600	800	1000		V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT AT $T_A=40^\circ\text{C}$	$I_O$	1.5								A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	50								A
TYPICAL JUNCTION CAPACITANCE PER ELEMENT (NOTE 1)	$C_J$	25								PF
STORAGE TEMPERATURE RANGE	$T_{STG}$	- 55 TO + 150								°C
OPERATING TEMPERATURE RANGE	$T_{OP}$	- 55 TO + 150								°C

#### ELECTRICAL CHARACTERISTICS ( $A_T T_A=25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	DF	DF	DF	DF	DF	DF	DF	DF	UNITS
		15005S	1501S	1502S	1504S	1506S	1508S	1510S		
MAXIMUM INSTANTANEOUS FORWARD VOLTAGE DROP PER ELEMENT AT $I_O$ DC	$V_F$	1.1								V
MAXIMUM REVERSE CURRENT $T_A=25^\circ\text{C}$	$I_R$	10								$\mu\text{A}$
AT RATED DC BLOCKING VOLTAGE PER ELEMENT $T_A=125^\circ\text{C}$		0.5								mA

NOTE: 1. MEASURED AT 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS

# RATING AND CHARACTERISTICS CURVES DF15005S THRU DF1510S

FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

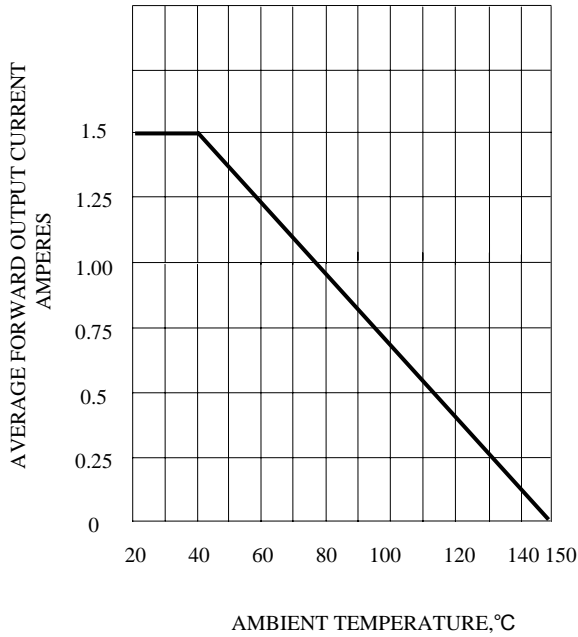


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

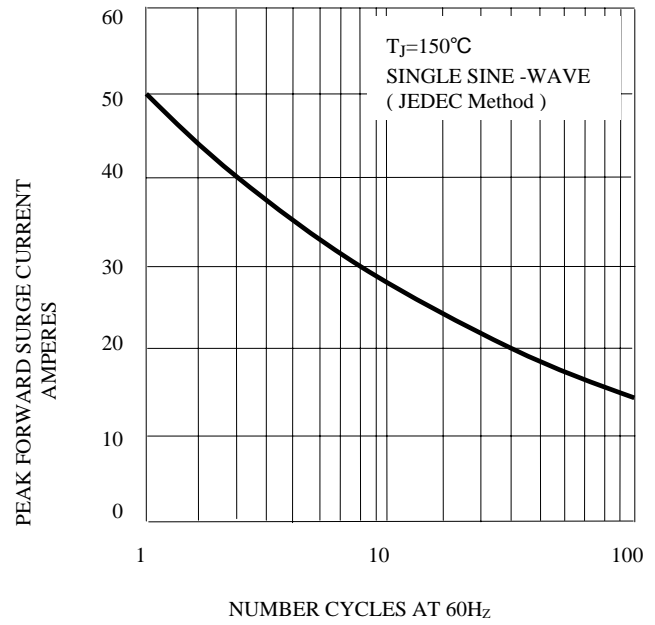


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

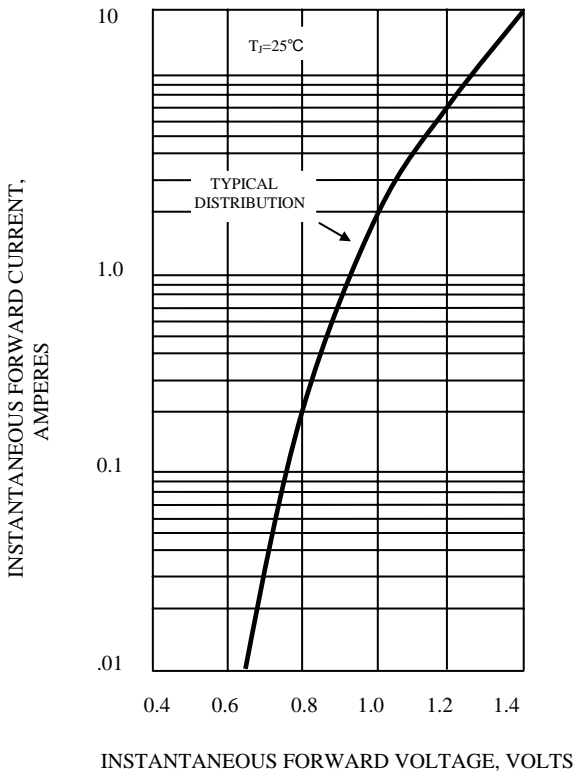


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

