

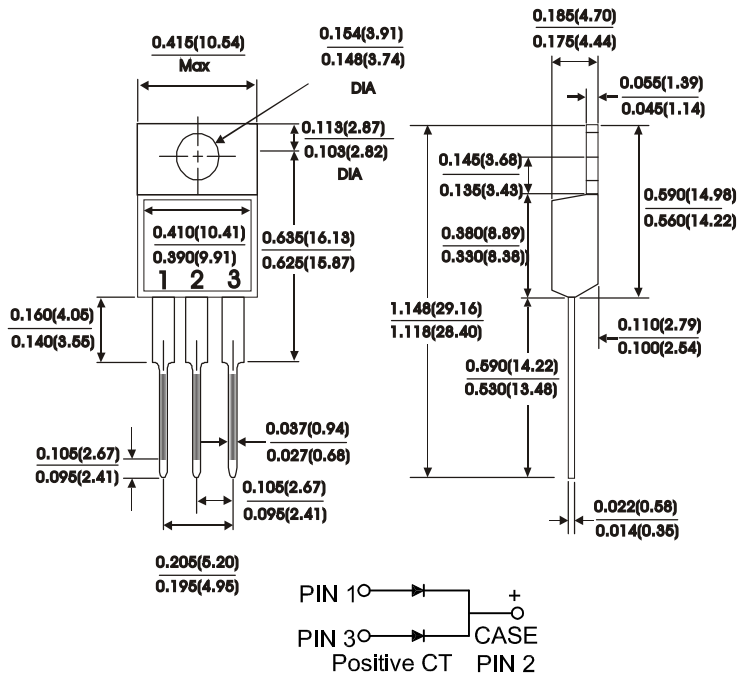
TO-220 AB

FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive centertap
- Glass passivated chip junctions
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High temperature soldering guaranteed: 250°C/10 seconds, 0.25"(6.35mm) from case

MECHANICAL DATA

Case : JEDEC TO-220AB molded plastic
 Terminals : Leads solderable per MIL-STD-750 Method 2026
 Polarity : As marked
 Mounting Postition : Any
 Mounting Torque 5 in - lbs.max
 Weight : 0.08 ounce, 2.24 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.

Characteristic	Symbol	FR	FR	FR	FR	FR	FR	FR	Units
		16005CT	1601CT	1602CT	1604CT	1606CT	1608CT	1610CT	
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at See fig. 1	I _O	16							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	I _{FSM}	150							Amps
Maximum instantaneous forward voltage (Per leg) I _F = 8.0A	V _F	1.30							Volts
Maximum DC reverse current at rated DC blocking voltage (Per leg) T _C = 25°C T _C = 125°C	I _R	5.0 100							μA
Typical reverse recovery time(NOTE 1)(Per leg)	T _{RR}	150			250		500		nS
Operating temperature range	T _J	-40to+150							°C
Storage temperature range	T _{Stg}	-40to+150							°C

NOTES:
 (1) Reverse Recovery Test CONDITION : I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A
 (2) Marking : FR1601CT = FR1601 (Without Marking "CT")
 Symbol Marking

RATINGS AND CHARACTERISTIC CURVES FR16005CT THRU FR1610CT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

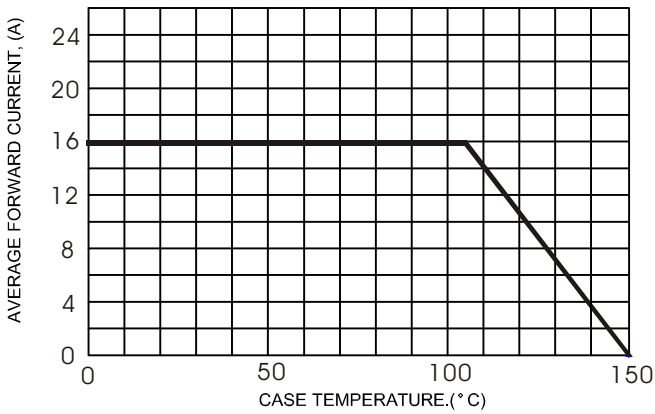


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

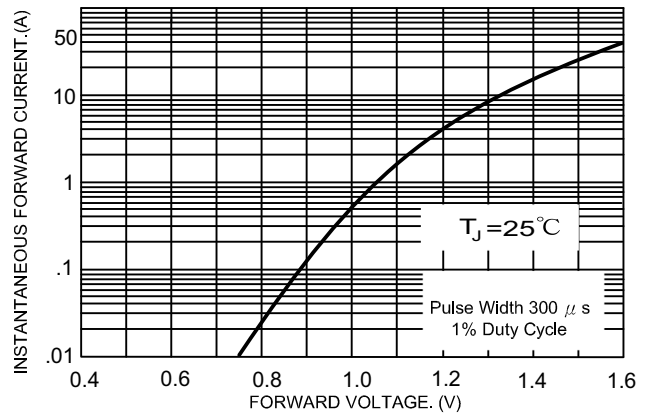


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

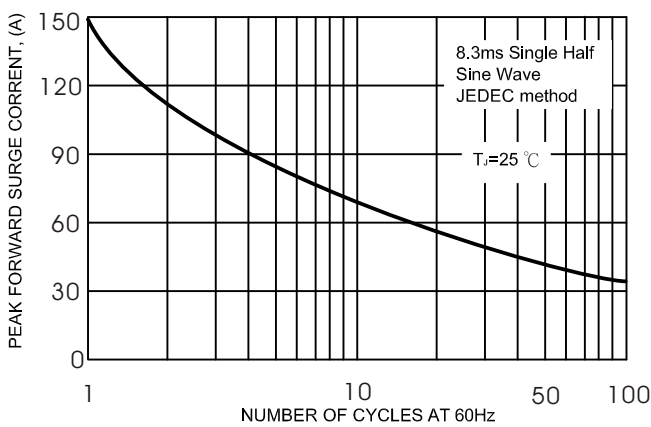


Figure 6 GR1 Test Circuit

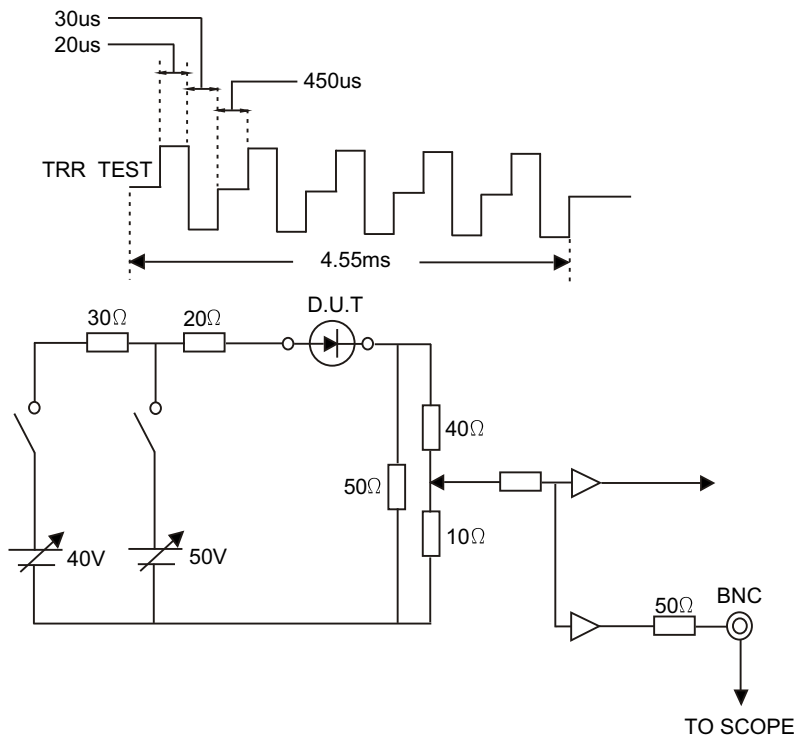


FIG.4- TYPICAL JUNCTION CAPACITANCE

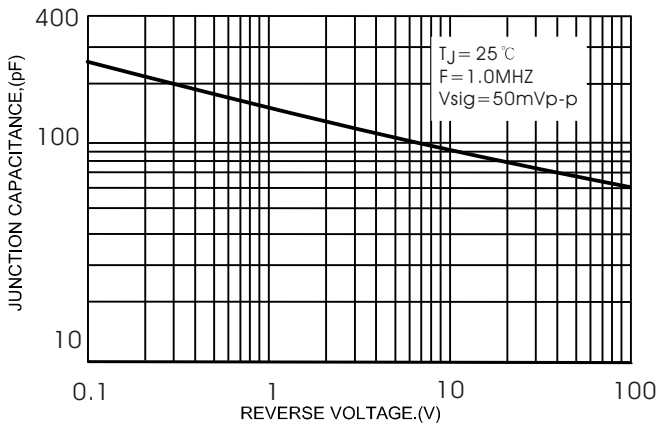


FIG.5- TYPICAL REVERSE CHARACTERISTICS

