

SOFT RECOVERY/FAST SWITCHING RECTIFIER
VOLTAGE RANGE 50 to 600 Volts CURRENT 3.0 Amperes

FEATURES

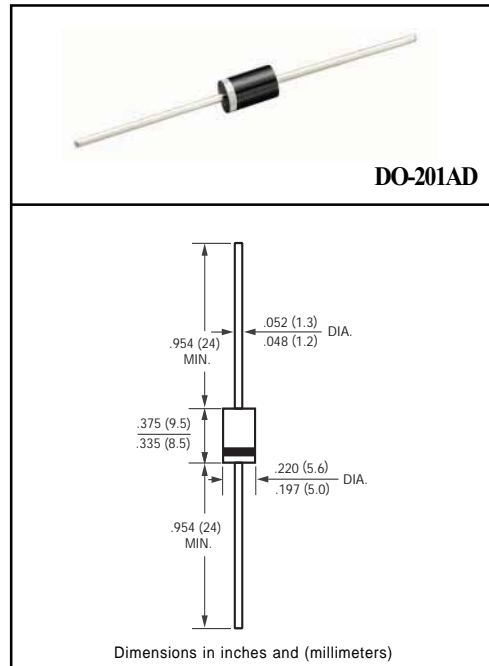
- * Fast switching
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * High surge capability
- * High reliability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 1.20 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%.



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	RL850	RL851	RL852	RL854	RL856	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	Volts
Maximum DC Blocking Voltage	V _{bc}	50	100	200	400	600	Volts
Maximum Average Forward Rectified Current at TA = 90°C	I _o	3.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	100					Amps
Maximum Reverse Recovery Current	I _{RR}	2.0					Amps
Current Squarad Time	i ² _t	41.5					A ² /Sec
Typical Junction Capacitance (Note 2)	C _J	65					pF
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150					°C

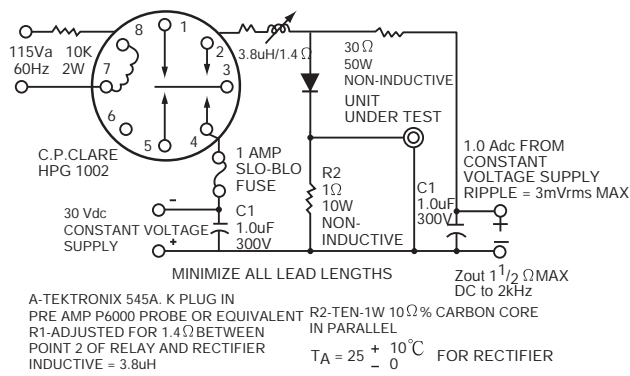
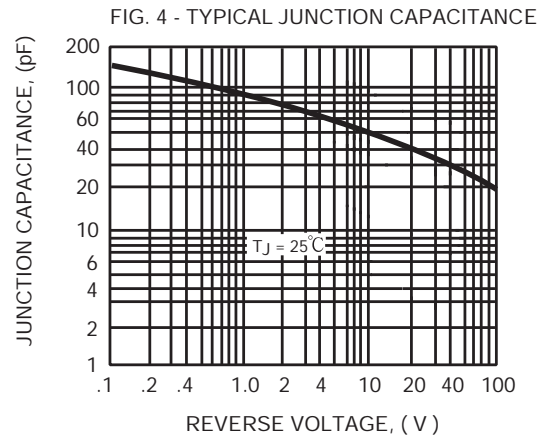
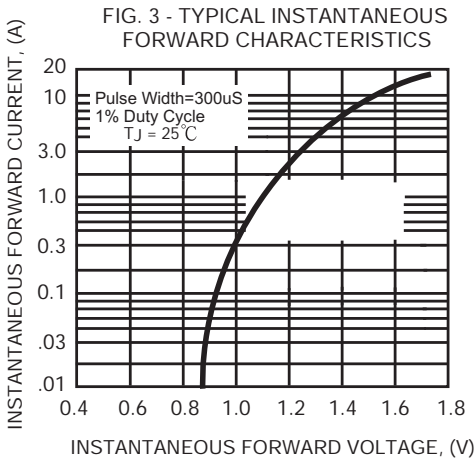
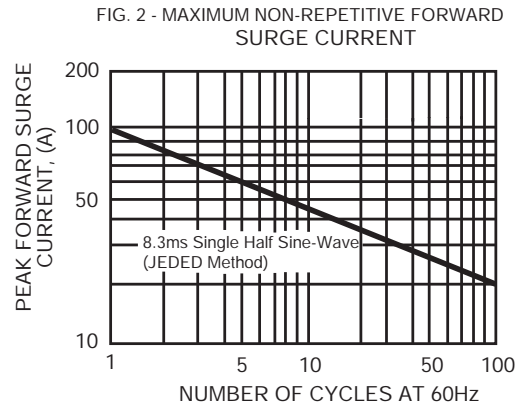
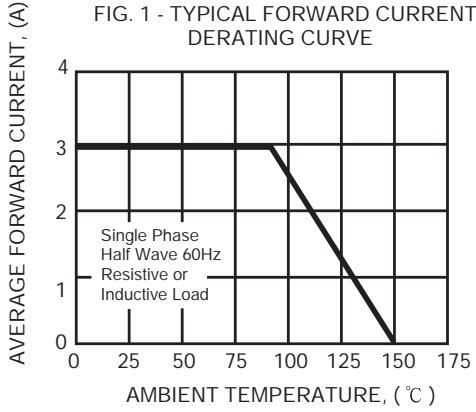
ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	RL850	RL851	RL852	RL854	RL856	UNITS
Maximum Instantaneous Forward Voltage at 3.0A DC	V _F	1.3					Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage TA = 25°C	I _R	1.0					uAmps
Maximum Full Load Reverse Current Average , Full Cycle .375" (9.5mm) lead length at TL = 100°C		150	150	200	250	300	uAmps
Maximum Reverse Recovery Time (Note 1)	t _{rr}	200					nSec

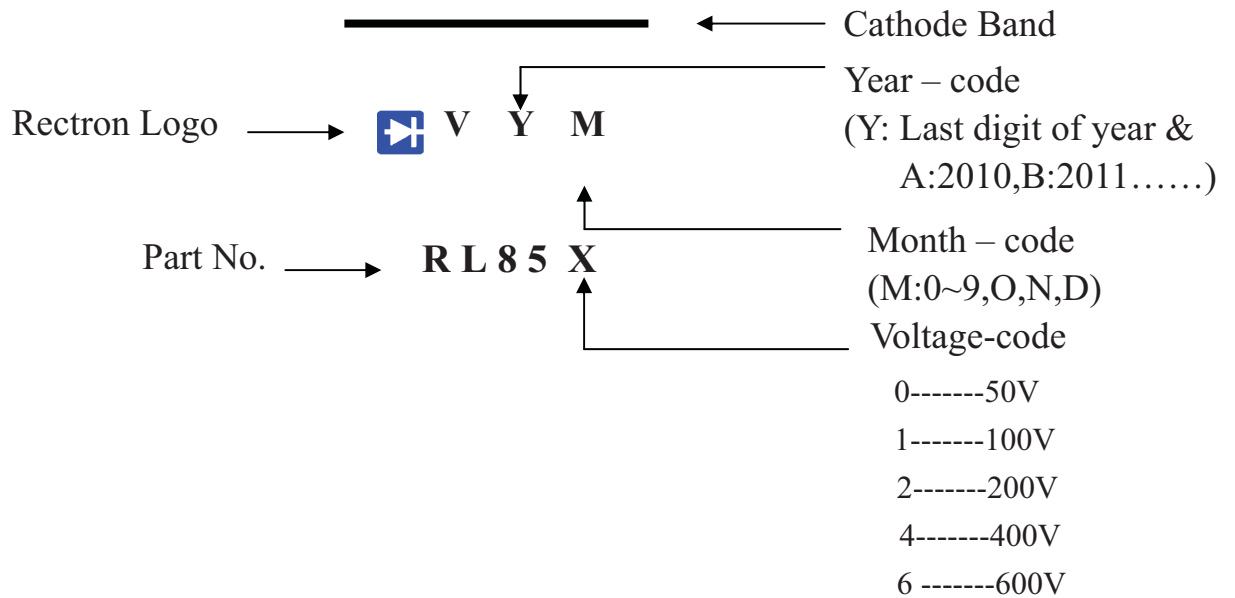
NOTES : 1. Test Conditions: I_F = 1.0A, V_R = 30V
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts

2020-04
REV:A

RATING AND CHARACTERISTIC CURVES (RL850 THRU RL856)



Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-201	-B	500	300*73*40	347*320*271	12,000	15.9

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-201	-T	1,200	1,200	5.0	52	330	355*350*335	4,800	9.10

AMMO PACK

PACKAGE	PACKING CODE	REEL (EA)	COMPONENT SPACE(mm)	TAPE SPACE (mm)	BOX SIZE (mm)	CARTON SIZE(mm)	CARTON (EA)	GROSS WEIGHT (Kg)
DO-201	-F	600	9.5	52	255*73*100	400*268*225	6,000	9.9

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