Certificate Number: Q10561

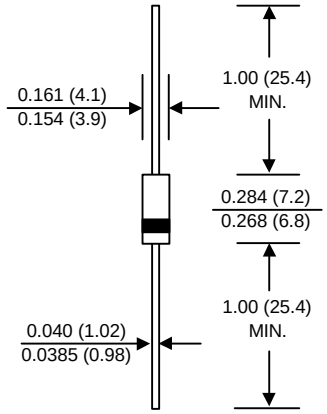
Certificate Number: E17276

RU3 - RU3C

FAST RECOVERY RECTIFIER DIODES

PRV : 400 - 1000 Volts
Io : 1.5 Amperes

D2A



Dimensions in inches and (millimeters)

FEATURES :

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

MECHANICAL DATA :

* Case : D2A Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.645 gram

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%.

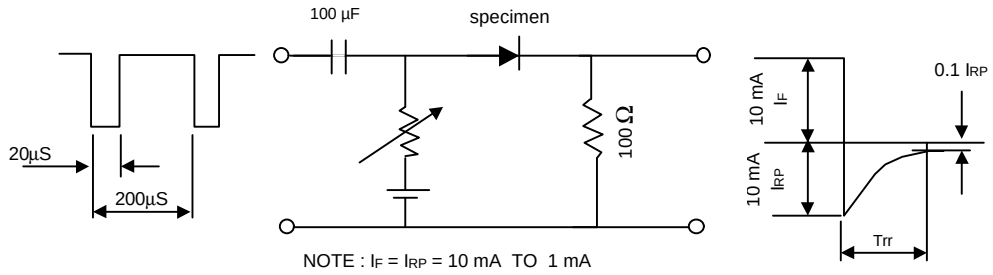
RATING	SYMBOL	RU3	RU3A	RU3B	RU3C	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	400	600	800	1000	V
Maximum Average Forward Current Ta = 55 °C	$I_{F(AV)}$	1.5				A
Maximum Peak Forward Surge Current (50 Hz, Half-cycle , Sine wave, Single Shot)	I_{FSM}	30				A
Maximum Forward Voltage at I_F = 1.5 Amps.	V_F	1.5			2.0	V
Maximum DC Reverse Current Ta = 25 °C	I_R	10				µA
at Rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	400				µA
Maximum Reverse Recovery Time (Note 1)	Trr	200				ns
Junction Temperature Range	T_J	- 40 to + 150				°C
Storage Temperature Range	T_{STG}	- 40 to + 150				°C

Notes :

(1) Reverse Recovery Test Conditions : I_F = 10 mA, I_{RP} = 10 mA.

RATING AND CHARACTERISTIC CURVES (RU3 - RU3C)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTE : $I_F = I_{RP}$ = 10 mA TO 1 mA

FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

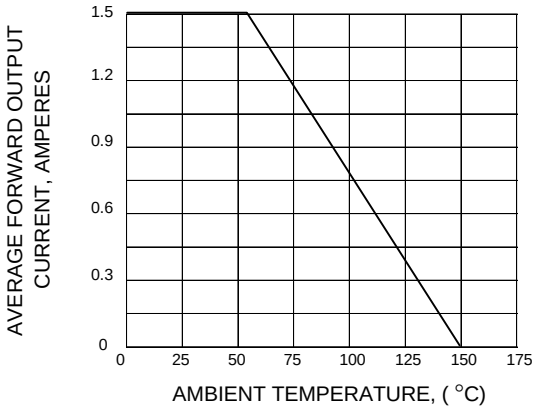


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

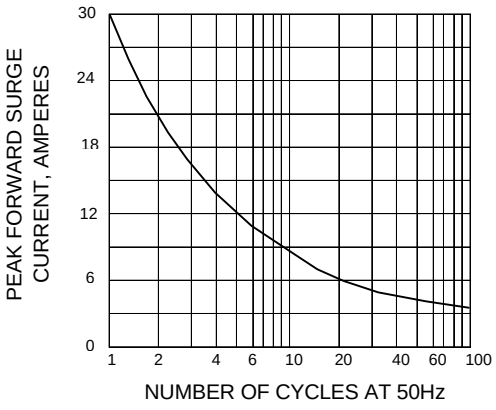


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

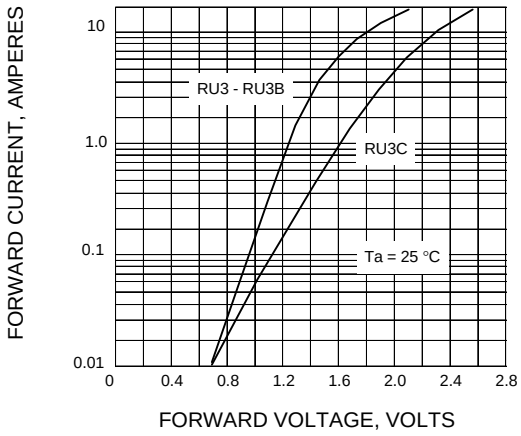


FIG.5 - TYPICAL REVERSE CHARACTERISTICS