

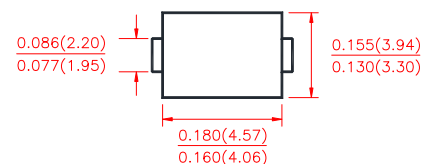
FEATURES

- Plastic package has UL flammability Classification 94V-0
- Glass Passivated chip junction
- Built in strain relief
- Fast switching speed for high efficiency
- High temperature soldering guaranteed: 250°C/10 seconds

VOLTAGE RANGE 50 to 1000 Volts

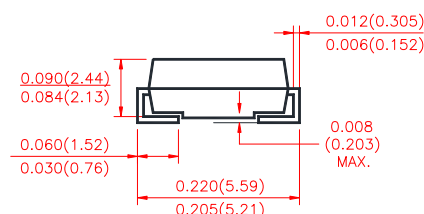
CURRENT 2.0 Ampere

DO-214AA(SMB)



MECHANICAL DATA

- Case: JEDED DO-214AA transfer molded plastic
- Terminals: Solder plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified.
- Single phase, half wave, 60Hz, resistive or inductive load.
- For capacitive load derate current by 20%.

MAXIMUM RATINGS & THERMAL CHARACTERISTICS

PARAMETELS		SYMBOLS	US2A	US2B	US2D	US2G	US2J	US2K	US2M	UNIT
Maximum Repetitive 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 T _L =105°C (NOTE 1)		I _(AV)	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	50							Amps
Maximum Instantaneous Forward Voltage at 2.0A		V _F	1.0			1.3	1.7			Volts
Maximum DC Reverse Current At rated DC blocking voltage at	T _A =25°C	I _R	5.0							μA
	T _A =125°C		100							
Maximum Reverse Recovery Time Test conditions I _F =0.5A, I _R =1.0A, I _{RR} =0.25A		t _{rr}	50				75			nS
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)		C _J	50				30			pF
Typical Thermal Resistance (NOTE 1)		R _{θJA}	75							°C/W
		R _{θJL}	17							
Operating Junction Temperature		T _J	(-55 to +150)							°C
Storage Tempetature Rang		T _{STG}	(-55 to +150)							°C

Notes:

1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with $0.3 \times 0.3''$ ($8.0 \times 8.0\text{mm}$) copper pad areas.

SYMBOLS	US2A	US2B	US2D	US2G	US2J	US2K	US2M
MARKING	US2A	US2B	US2D	US2G	US2J	US2K	US2M

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

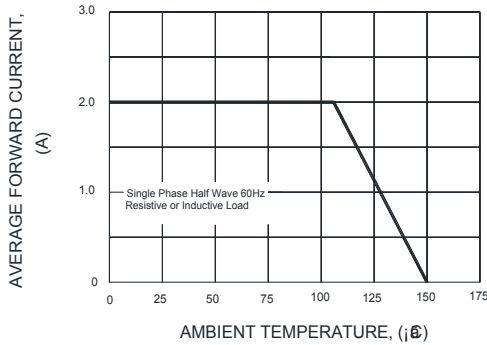


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

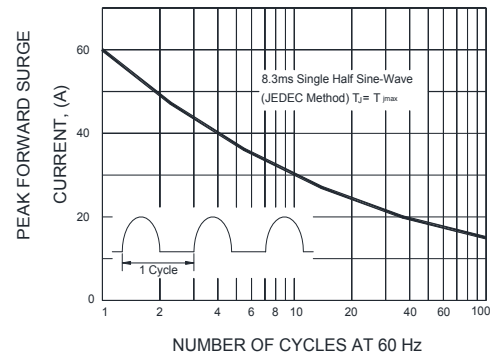


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

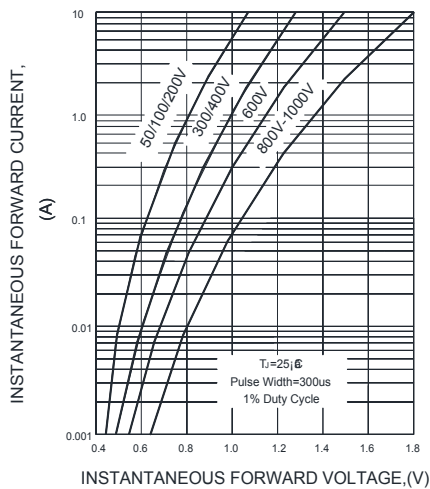


FIG.4-TYPICAL REVERSE CHARACTERISTICS

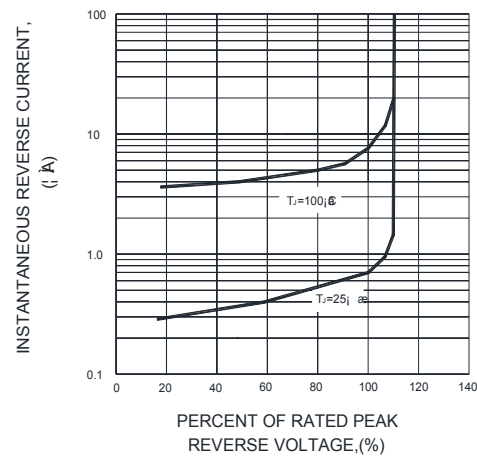


FIG.5-TYPICAL JUNCTION CAPACITANCE

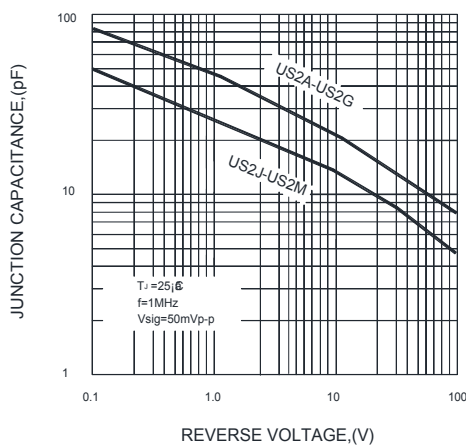
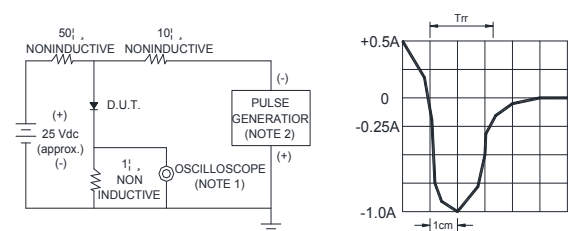


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. Rise Time = 7ns max. Input Impedance = 1 megohm. 22pF
2. Rise time = 10ns max. Source Impedance = 50 ohms

SET TIME BASE FOR 50/100ns/cm