

UX-F5B

PRV : 8000 Volts

Io : 350 mA

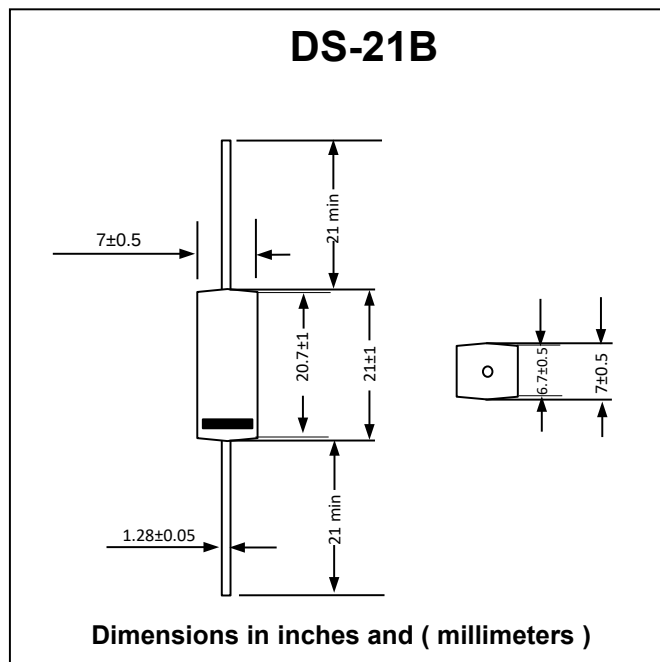
FEATURES :

- * Glass Passivated Junction Chip
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : DS-21B 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

HIGH VOLTAGE ULTRA FAST RECOVERY RECTIFIER



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	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	7500	V
Minimum Avalanche Breakdown Voltage @ I _{BR} = 5 μA	VBR(min.)	8500	V
Maximum Average Forward Current Ta = 60°C	IF(AV)	350	mA
Maximum Non-repetitive Peak Forward Surge Current , 50 Hz Sine half-wave	IFSM	15	A
Maximum Surge Reverse Current (Note 1)	IRSM	150	mA
Maximum Forward Voltage at IF = 350 mA	VF	14.0	V
Maximum Reverse Current at VR = VRRM	IR	10	μA
Maximum Typical Reverse Recovery Time (Note 2)	Trr	0.15	μs
Junction Temperature	TJ	120	°C
Storage Temperature Range	TSTG	- 30 to + 130	°C

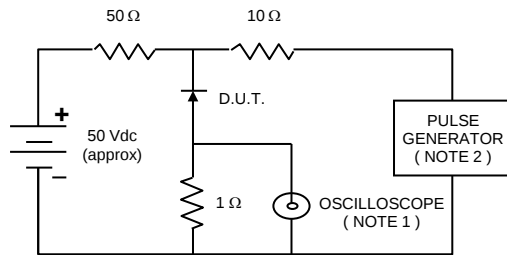
Notes :

(1) Single pulse, pulse width 50 μs

(2) Reverse Recovery Test Conditions : IF = 100 mA, IR = 100 mA.

RATING AND CHARACTERISTIC CURVES (UX-F5B)

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



NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
2. Rise time = 10 ns max., Source Impedance = 50 ohms.
3. All Resistors = Non-inductive Types.

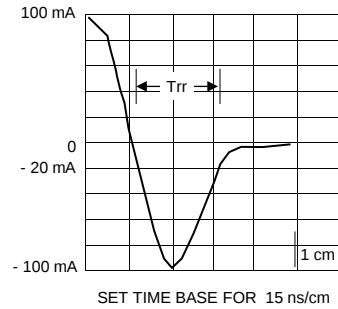


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

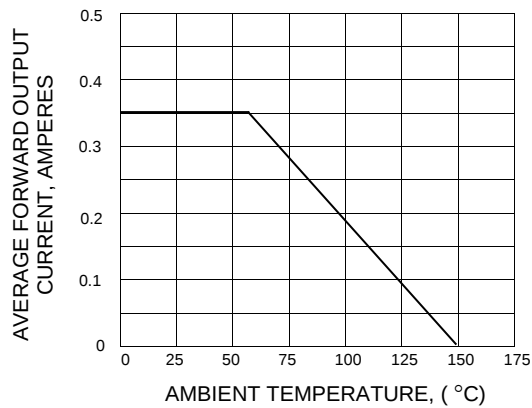


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

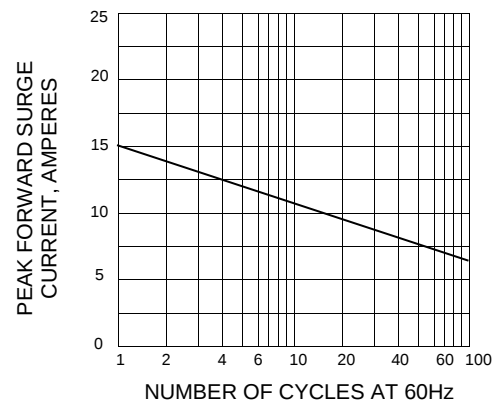


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

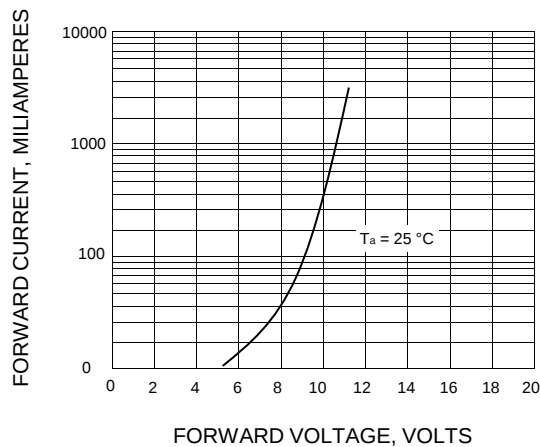


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

