

UH30045

PRV : 3000 Volts
I_o : 0.45 Ampere

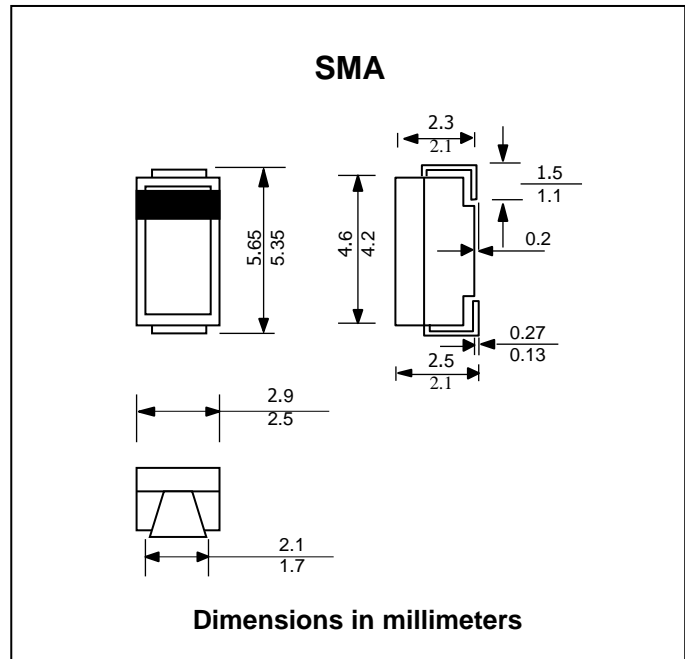
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SMA Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.060 gram (Approximately)

HIGH VOLTAGE ULTRAFAST RECTIFIER DIODES



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 Recurrent Peak Reverse Voltage	V _{RRM}	3000	V
Maximum Average Forward Current	I _{F(AV)}	0.45	A
Maximum Peak Forward Surge Current	I _{FSM}	10	A
Maximum Forward Voltage at I _F = 100 mA	V _F	3.6	V
Maximum Reverse Current at V _R = V _{RRM} Ta = 25 °C	I _R	0.5	µA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	75	ns
Thermal Resistance from Junction to Case	R _{th(j-c)}	22	°C/W
Typical Junction Capacitance (Note 2)	C _J	9	pF
Junction Temperature Range	T _J	- 65 to + 175	°C
Storage Temperature Range	T _{STG}	- 65 to + 175	°C

Note :

- (1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A.
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC

RATING AND CHARACTERISTIC CURVES (UH30045)

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

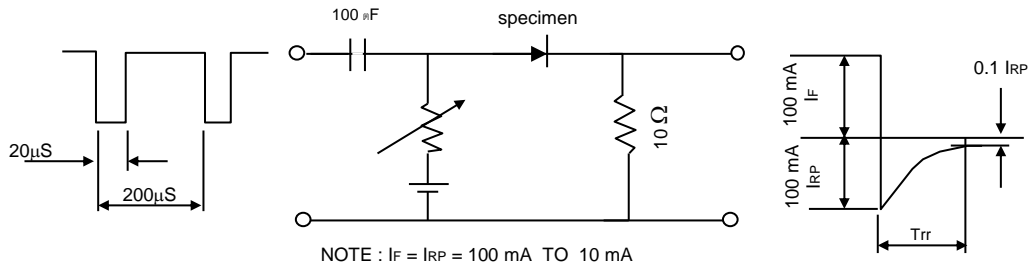


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

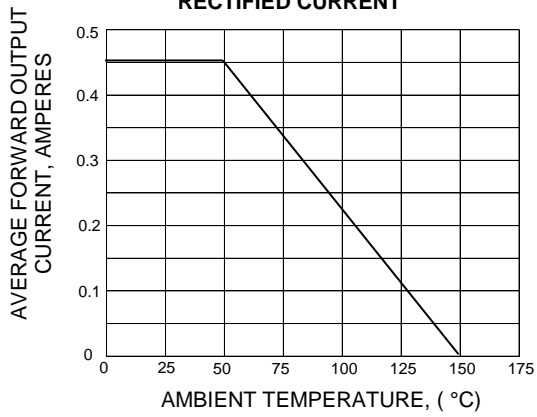


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

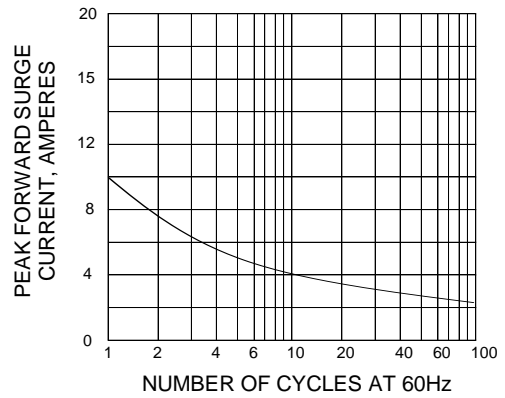


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

