



ULCEEPS5 ~ 48

ULTRA LOW CAPACITANCE TRANSIENT VOLTAGE SUPPRESSOR

V_R : 5.0 - 48 Volts

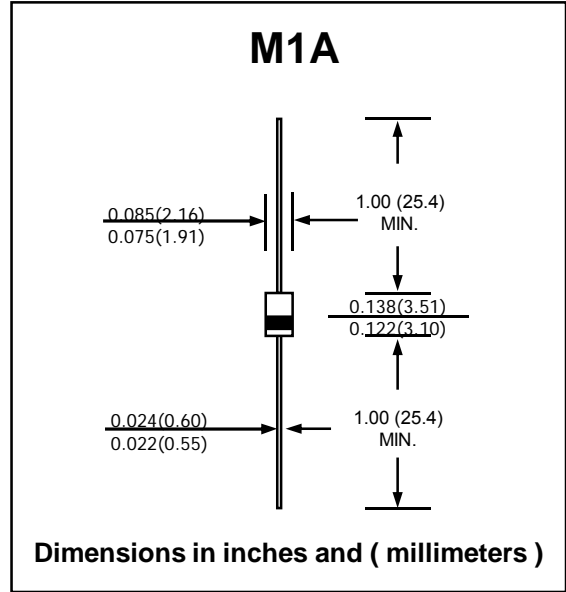
P_{PK} : 1000 Watts

FEATURES :

- * Glass passivated junction chip
- * 1000 W for 8 x 20 μ pulse
- * 150 W for 1 ms pulse
- * Clamping time in pico seconds
- * Extremely low leakage current
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : M1A Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Mounting position : Any
- * Weight : 0.20 gram (approximately)



MAXIMUM RATINGS (Rating at 25 °C ambient temperature unless otherwise specified.)

Rating	Symbol	Value	Unit
Peak Pulse Power (8 x 20 μs pulse)	P _{PK}	1000	W
Peak Pulse Power (1 ms pulse)	P _{PK}	150	W
Power Continuous at T _L = 75 °C, L = 0.375"	P _D	2.5	W
Operating and Storage Temperature Range	T _J , T _{STG}	- 65 to + 175	°C

ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

Type No.	Minimum Breakdown Voltage @ 1mA	Stand-off Voltage	Maximum Reverse Leakage @ V _R	Maximum Clamping Voltage @ 10 A	Maximum Temperature Co-efficient of VBR (% / °C)	Maximum Junction Capacitance @ 0 Volt (pF)
	V _{BR} (V) Min.		V _R (V)	I _R (μA)		
ULCEEPS5	8.0	5	50	13.5	0.030	10
ULCEEPS8	11.0	8	2.0	17.7	0.040	10
ULCEEPS12	15.8	12	1.0	25.6	0.050	10
ULCEEPS15	18.7	15	1.0	30.0	0.055	10
ULCEEPS17	21.0	17	1.0	33.2	0.060	10
ULCEEPS24	30.4	24	1.0	47.2	0.070	10
ULCEEPS28	33.0	28	1.0	51.8	0.075	10
ULCEEPS33	38.8	33	1.0	60.7	0.080	10
ULCEEPS48	56.0	48	1.0	88.3	0.090	10

Note : (1) Marking "EE" will be omitted in marking on the diode. (ULCPS5, ULCPS8,..., ULCPS48)

RATING AND CHARACTERISTIC CURVES (ULCEEPS5 ~ ULCEEPS48)

FIG.1 - DREATING CURVE

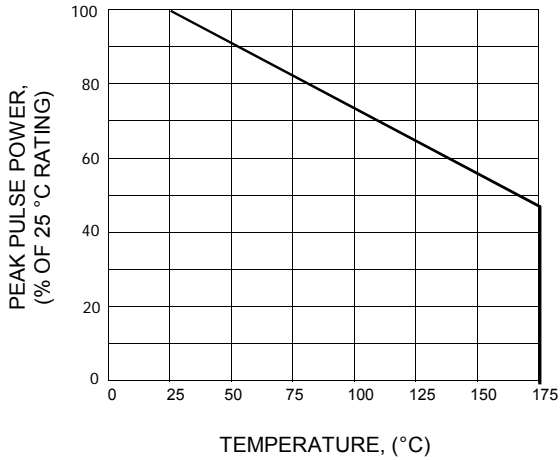


FIG.2 - CURRENT IMPULSE WAVEFORM

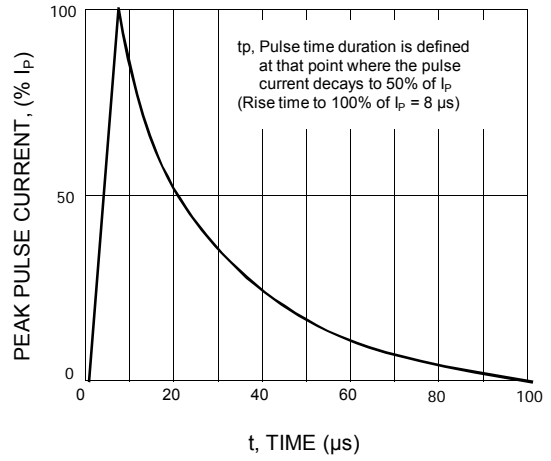


FIG.3 - PEAK PULSE POWER VS. PULSE DURATION

