

**Microsemi Corp.**  
The diode experts

SANTA ANA, CA

For more information call:  
(714) 979-8220

**ALSO AVAILABLE IN SURFACE MOUNT**

**IN6461 thru  
IN6468 and  
IN6469 thru  
IN6476**

**FEATURES**

- HIGH SURGE CAPACITY PROVIDES TRANSIENT PROTECTION FOR MOST CRITICAL CIRCUITS.
- TRIPLE LAYER PASSIVATION.
- SUBMINIATURE.
- METALLURGICALLY BONDED.
- VOIDLESS HERMETICALLY SEALED GLASS PACKAGE.
- DYNAMIC IMPEDANCE AND REVERSE LEAKAGE LOWEST AVAILABLE.
- JAN/TX/TVX TYPES AVAILABLE PER MIL-S-19500/551, 552.

**MAXIMUM RATINGS**

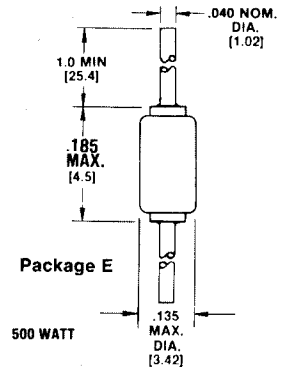
Operating Temperature: -65°C to +175°C.  
Storage Temperature: -65°C to +200°C.  
Surge Power 500W & 1500W  
Power @ TA = 25°C (3%) 2.5W 500W Type  
Power @ TL = 50°C (3%) 5.0W 1500W Type

**ELECTRICAL CHARACTERISTICS**

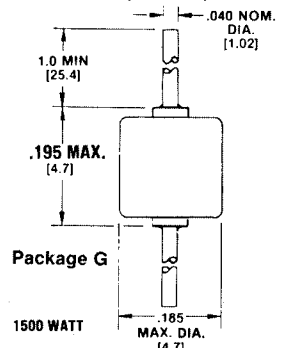
SERIES TYPE		BREAK DOWN VOLTAGE V <sub>(BR)</sub> MIN.	TEST CURRENT I <sub>T</sub>		WORKING PEAK VOLTAGE V <sub>WM</sub>	MAX LEAKAGE CURRENT I <sub>0</sub>		MAX CLAMPING VOLTAGE V <sub>C</sub>	MAX PEAK PULSE CURRENT I <sub>(PP)</sub>		MAX. TEMP. COEF. OF V <sub>(BR)</sub>
500W	1500W	Vdc	mA		Vdc	μA	μA	V(pk)	A(pk)	A(pk)	%/°C
IN6461	IN6469	5.6	25	50	5	3000	5000	9.0	56	167	0.04
IN6462	IN6470	6.5	20	50	6	2500	5000	11.0	46	137	0.04
IN6463	IN6471	13.0	5	10	12	500	1000	22.6	22	66	0.05
IN6464	IN6472	16.4	5	10	15	500	1000	26.5	19	57	0.06
IN6465	IN6473	27.0	2	5	24	50	100	41.4	12	36.5	.084
IN6466	IN6474	33.0	1	1	30.5	3	5	47.5	11	32	.093
IN6467	IN6475	43.7	1	1	40.3	2	5	63.5	8	24	.094
IN6468	IN6476	54.0	1	1	51.6	2	5	78.5	6	19	.096
NOTES		1	2	3	1	2	3	1	2	3	1

- NOTE 1:** Applies to both 500W and 1500W series.  
**NOTE 2:** Applies to only 500W series.  
**NOTE 3:** Applies to only 1500W series.

**TRANSIENT SUPPRESSORS**



**FIGURE 1 (NOTE 2)**



**FIGURE 1A (NOTE 3)**

**MECHANICAL CHARACTERISTICS**

- CASE: Hermetically sealed glass case.
- LEAD MATERIAL: Tinned copper or silver clad copper.
- MARKING: Body painted, alpha numeric.
- POLARITY: Cathode band.

# 1N6461 thru 1N6468 & 1N6469 thru 1N6476

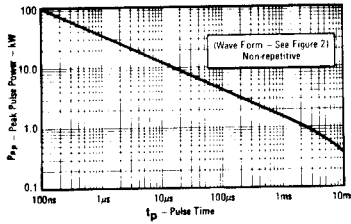


Figure 1. Pulse Time  
1N6469 Series

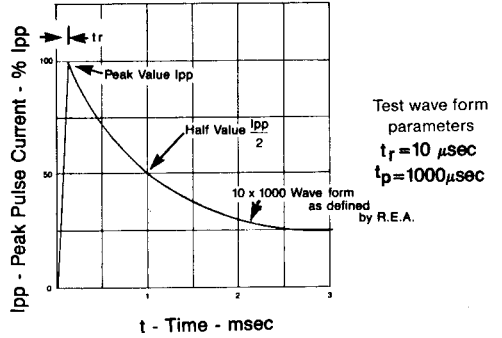


Figure 2. Current Impulse Waveform

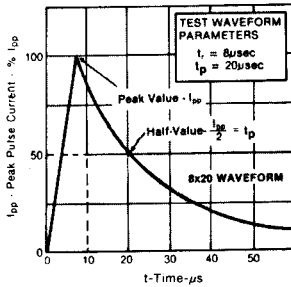


Figure 3. Current Impulse Waveform

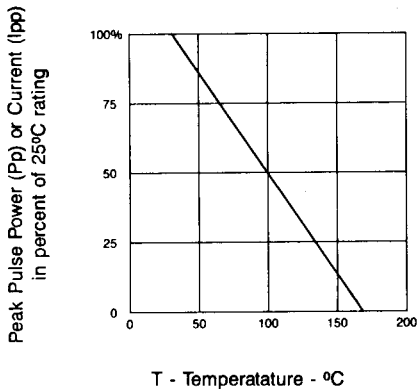


Figure 4. Derating Curve

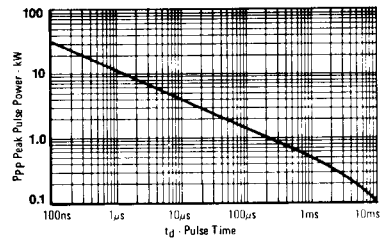


Figure 5. Pulse Waveform  
1N6461 Series