

**ALSO
AVAILABLE IN
SURFACE
MOUNT**

Microsemi Corp.
The diode experts

SCOTTSDALE, AZ
For more information call:
(602) 941-6300

**LCE6.5
thru
LCE170A
LOW CAPACITANCE**

FEATURES

This series employs a standard TAZ in series with a rectifier with the same transient capabilities as the TAZ. The rectifier is also used to reduce the effective capacitance up thru 100 MHz with a minimum amount of signal loss or deformation. The low-capacitance TAZ may be applied directly across the signal line to prevent induced transients from lightning, power interruptions, or static discharge. If bipolar transient capability is required, two low-capacitance TAZ must be used in parallel, opposite in polarity for complete AC protection.

- 1500 WATTS OF PEAK PULSE POWER DISSIPATION AT 25°C AND 10 x 1000 μ s
- AVAILABLE IN RANGES FROM 6.5—200V
- LOW CAPACITANCE AC SIGNAL PROTECTION

MAXIMUM RATINGS

1500 Watts of Peak Pulse Power dissipation at 25°C
 t_{clamping} (0 volts to $V_{(BR)}$ min): Less than 5×10^{-9} seconds
 Operating and Storage temperatures: -65° to +175°C
 Steady State power dissipation: 5.0W @ $T_L = 75^\circ\text{C}$
 Lead Length = 3/8"
 Repetition Rate (duty cycle): .05%

ELECTRICAL CHARACTERISTICS

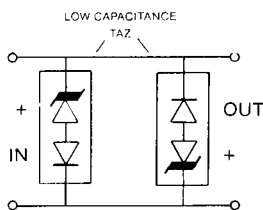
Clamping Factor: 1.4 @ Full Rated power
 1.30 @ 50% Rated power

Clamping Factor: The ratio of the actual V_C (Clamping Voltage) to the actual $V_{(BR)}$ (Breakdown Voltage) as measured on a specific device.

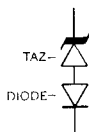
NOTE: When pulse testing, test in TAZ Avalanche direction. DO NOT pulse in forward direction.

APPLICATION

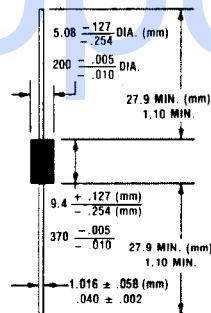
Devices must be used with two units in parallel, opposite in polarity, as shown in circuit for AC Signal Line protection:



SCHMATIC



TRANSIENT ABSORPTION ZENER



MECHANICAL CHARACTERISTICS

CASE: Void free transfer molded thermosetting plastic.

FINISH: Silver plated copper readily solderable.

POLARITY: Cathode marked with band.

WEIGHT: 1.5 grams (Appx.).

MOUNTING POSITION: Any.

