

# Installation notes

## S10 automotive hifi subwoofer

### description

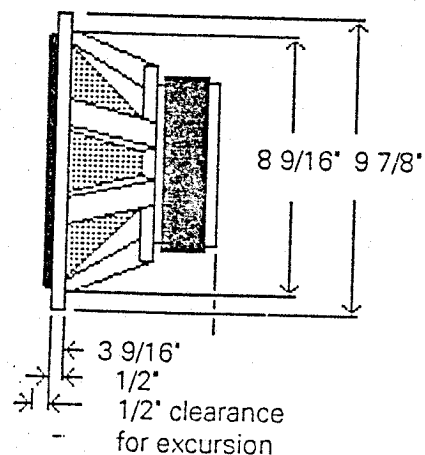
A 10" high compliance subwoofer with Stiffite® cone designed for custom sealed enclosure or infinite baffle applications. A butyl rubber surround and ultra long throw 2" linear drive wet wound Kapton® voice coil provides high power handling and long-term durability. A cast basket provides high rigidity and assures precise alignment of the moving structure especially needed in rear-deck infinite baffle applications.

### specifications

Free-air resonance -  $F_s = 16\text{Hz} \pm 1\text{Hz}$   
Equivalent volume of compliance -  $V_{as} = 8.1$  cubic feet  
Total damping -  $Q_{ts} = .208$   
Electrical damping -  $Q_{es} = .217$   
Mechanical damping -  $Q_{ms} = 5.17$   
Piston area -  $S_d = 51.1$  square inches  
Peak linear excursion -  $X_{max} = \pm .23"$   
Recommended amplifier power - min. 20W, max. 200W  
Impedance =  $4\Omega$  nominal,  $3.6\Omega$  DC resistance

### enclosure recommendations

- A. **1/2 cubic foot**  
 $F_c = 66\text{Hz}$   
 $Q_{tc} = .86$   
-3db point = 56Hz
- B. **3/4 cubic foot**  
 $F_c = 55\text{Hz}$   
 $Q_{tc} = .71$   
-3db point = 55Hz
- C. **1.0 cubic foot**  
 $F_c = 48\text{Hz}$   
 $Q_{tc} = .62$   
-3db point = 54Hz
- D.  **$\geq 8$  cubic foot (infinite baffle)**  
 $F_c \leq 22.83\text{Hz}$   
 $Q_{tc} \leq .29$   
-3db point  $\leq 30\text{Hz}$



\*referenced to 85Hz when used with 642CSI