

RELIABILITY MONITOR

| PRODUCT | MONITOR DATE | DATE CODE | ASSEMBLY FACILITY | ASSEMBLY LOT NO | PROCESS TYPE | PACKAGE TYPE |
|---------|--------------|-----------|-------------------|-----------------|--------------|--------------|
| DS1233 | Oct-96 | 9644 A5 | CARSEM | DM635839AAA | 1.2μ NITRIDE | 03 SOT223 |

STRESS/JOB NO.

**READPOINT
(Sample Size/No. of Fails)**

Preconditioning (P/C):
HTC Vapor Phase
P-18585

| | |
|-------------------|--------------|
| <u>Electrical</u> | <u>Cum %</u> |
| 229/0 | 0.0% |

Sonoscan
P-18652

| |
|-------------------------|
| <u>Post Vapor Phase</u> |
| 4/0 |

Infant / High Voltage Life
125°C, 7.0 V.
P-18653, P-18764

| | | | |
|--------------|---------------|-------------|----------------------|
| <u>48 Hr</u> | <u>336 Hr</u> | <u>1KHr</u> | <u>*Failure Rate</u> |
| 224/0 | 77/0 | 77/0 | 30 Fits |

*Chi Squared Method, 60% C. L., 55°C & 5.5V; Temperature Derating: Ea = 0.7 ev; Voltage Derating B = 1.0

Temp Cycle
-55°C to +125°C
P-18765

| | | |
|--------------|-------------|--------------|
| <u>300 ~</u> | <u>1K ~</u> | <u>Cum %</u> |
| 38/0 | 38/0 | 0.0% |

Biased Moisture (HAST)
120°C/85% RH, 5.5 V.
P-18766

| | |
|---------------|--------------|
| <u>100 Hr</u> | <u>Cum %</u> |
| 72/0 | 0.0% |

Autoclave
121°C/100% RH, 2 Atmos
P-18767

| | |
|--------------|--------------|
| <u>96 Hr</u> | <u>Cum %</u> |
| 37/0 | 0.0% |

Failure Mode

Failure Analysis