

34C 37982 D
7-35-15

SILICON SMALL-SIGNAL TRANSISTOR DICE (continued)

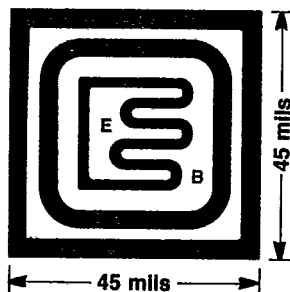
DIE NO. **2C3439** — NPN
LINE SOURCE — DSL242

This die provides performance similar to that of the following device types:

2N3439
2N3440
MM420
MM421

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Designed for high-voltage audio and video amplifier applications.



Backside Collector

METALLIZATION —

Top Al
Back Au

BACKSIDE GOLD 3000Å

DIE THICKNESS 6 ± 2 mils

BONDING PAD SIZE —

Emitter 4.0×7.0 mils
Base 4.0×7.0 mils

GLASSIVATION — The die active area, except for bond windows, is covered with Glassivation to protect from contaminants and accidental bonding.

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$; Note 1)

Parameter	Test Conditions	Min	Max	Unit
BV_{CEO}	$I_C = 50 \text{ mAdc}$, $I_B = 0$	350	—	Vdc
BV_{CBO}	$I_C = 20 \text{ } \mu\text{Adc}$, $I_E = 0$	360	—	Vdc
BV_{EBO}	$I_E = 20 \text{ } \mu\text{Adc}$, $I_C = 0$	6.0	—	Vdc
h_{FE}	$I_C = 20 \text{ mAdc}$, $V_{CE} = 10 \text{ Vdc}$	40	160	—

- NOTES: 1. Because of the limitations of probe testing, only dc parameters are tested. These parameters must be measured using pulse techniques: pulse width $\leq 300 \text{ } \mu\text{s}$, duty cycle $\leq 2\%$.
2. Detailed device characteristics are available from your Motorola sales representative.