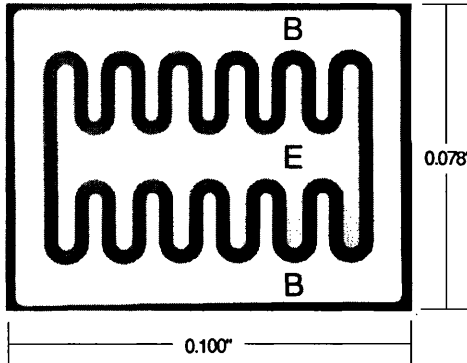


**General  
Semiconductor  
Industries, Inc.**

**NPN  
TRANSISTOR  
CHIP  
"05"**

Typical Device Types: 2N2891



**Bonding Pad Areas**

**Base**  
(2) 88 x 9 mils

**Emitter**  
(2) 69 x 10 mils

**Front Metallization:**  
Aluminum

**Back Metallization:**  
Gold  
or  
Chrome-Silver-Gold

**5 AMP**  
Fast  
Switching

**Typical  
Switching**  
(TO-111 Package)

- $t_r = 60\text{nsec}$
- $t_s = 1000\text{nsec}$
- $t_f = 100\text{nsec}$

Conditions:  
 $V_{CC} = 40\text{V}$ ,  $I_C = 2.0\text{A}$ ,  
 $I_{B1} = I_{B2} = 0.2\text{A}$

**ELECTRICAL CHARACTERISTICS @ TA = 25°C**

SYMBOL	CONDITIONS	Min	Max	Unit
$BV_{CBO}$	$I_{CB} = 1.0\text{mA}$	200		Volts
$BV_{CEO}$	$I_{CE} = 50\text{mA}$	120		Volts
$BV_{EBO}$	$I_{EB} = 10\mu\text{A}$	8.0		Volts
$I_{CBO}$	$V_{CB} = 120\text{V}$		0.5	$\mu\text{A}$
$I_{EBO}$	$V_{EB} = 8.0\text{V}$		10	$\mu\text{A}$
$H_{FE}$	$I_C = 100\text{mA}$ , $V_{CE} = 2.0\text{V}$	40	120	
$H_{FE}$	$I_C = 3.0\text{A}$ , $V_{CE} = 5.0\text{V}$	40		
$V_{CE(SAT)}^*$	$I_C = 3.0\text{A}$ , $I_B = 0.3\text{A}$		0.6*	Volts

\* When assembled in a TO-5 package