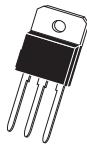


TIP35 TIP35A TIP35B TIP35C NPN  
TIP36 TIP36A TIP36B TIP36C PNP

**COMPLEMENTARY SILICON  
POWER TRANSISTORS**



**TO-218 TRANSISTOR CASE**

**Central**<sup>TM</sup>  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR TIP35, TIP36 Series types are Complementary Silicon Power Transistors manufactured by the epitaxial base process, designed for high current amplifier and switching applications.

**MARKING: FULL PART NUMBER**

**MAXIMUM RATINGS: ( $T_C=25^\circ\text{C}$ )**

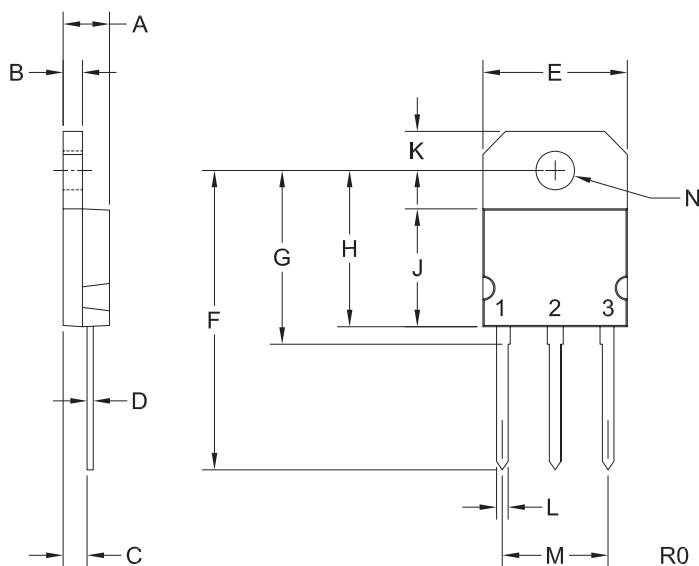
	SYMBOL	TIP35 TIP36	TIP35A TIP36A	TIP35B TIP36B	TIP35C TIP36C	UNITS
Collector-Base Voltage	$V_{CBO}$	40	60	80	100	V
Collector-Emitter Voltage	$V_{CEO}$	40	60	80	100	V
Emitter-Base Voltage	$V_{EBO}$			5.0		V
Continuous Collector Current	$I_C$			25		A
Peak Collector Current	$I_{CM}$			40		A
Base Current	$I_B$			5.0		A
Power Dissipation	$P_D$			125		W
Operating and Storage Junction Temperature	$T_J, T_{stg}$			-65 to +150		$^\circ\text{C}$
Thermal Resistance	$\Theta_{JC}$			1.0		$^\circ\text{C}/\text{W}$

**ELECTRICAL CHARACTERISTICS: ( $T_C=25^\circ\text{C}$  unless otherwise noted)**

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_{CEO}$	$V_{CE}=30\text{V}, (\text{TIP35, TIP35A, TIP36, TIP36A})$		1.0	mA
$I_{CEO}$	$V_{CE}=60\text{V}, (\text{TIP35B, TIP35C, TIP36B, TIP36C})$		1.0	mA
$I_{CES}$	$V_{CE}=\text{Rated } V_{CEO}$		0.7	mA
$I_{EBO}$	$V_{EB}=5.0\text{V}$		1.0	mA
$BV_{CEO}$	$I_C=30\text{mA} (\text{TIP35, TIP36})$	40		V
$BV_{CEO}$	$I_C=30\text{mA} (\text{TIP35A, TIP36A})$	60		V
$BV_{CEO}$	$I_C=30\text{mA} (\text{TIP35B, TIP36B})$	80		V
$BV_{CEO}$	$I_C=30\text{mA} (\text{TIP35C, TIP36C})$	100		V
$V_{CE(\text{SAT})}$	$I_C=15\text{A}, I_B=1.5\text{A}$		1.8	V
$V_{CE(\text{SAT})}$	$I_C=25\text{A}, I_B=5.0\text{A}$		4.0	V
$V_{BE(\text{ON})}$	$V_{CE}=4.0\text{V}, I_C=15\text{A}$		2.0	V
$V_{BE(\text{ON})}$	$V_{CE}=4.0\text{V}, I_C=25\text{A}$		4.5	V
$h_{FE}$	$V_{CE}=4.0\text{V}, I_C=1.5\text{A}$	25		
$h_{FE}$	$V_{CE}=4.0\text{V}, I_C=15\text{A}$	10	100	
$h_{fe}$	$V_{CE}=10\text{V}, I_C=1.0\text{A}, f=1.0\text{kHz}$	25		
$f_T$	$V_{CE}=10\text{V}, I_C=1.0\text{A}, f=1.0\text{MHz}$	3.0		MHz

COMPLEMENTARY SILICON  
POWER TRANSISTORS

TO-218 TRANSISTOR CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.185	0.193	4.70	4.90
B	0.075	0.082	1.91	2.08
C	0.098		2.49	
D	0.019	0.030	0.48	0.76
E	0.578	0.598	14.68	15.19
F	1.220		30.99	
G	0.708		17.98	
H	-	0.637	-	16.18
J	-	0.480	-	12.19
K	0.155	0.163	3.94	4.14
L	0.043	0.051	1.09	1.30
M	0.425	0.437	10.80	11.10
N	0.157	0.161	3.99	4.09

TO-218 Transistor (REV: R0)

**LEAD CODE:**

- 1) BASE
- 2) COLLECTOR
- 3) EMITTER

Note: Tab is common to lead 2.

**MARKING:**  
**FULL PART NUMBER**