

2N5758 2N5759 2N5760 NPN  
2N6226 2N6227 2N6228 PNP

**COMPLEMENTARY SILICON  
POWER TRANSISTORS**



**TO-3 CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 2N5758, 2N6226 series types are complementary silicon power transistors, manufactured by the epitaxial base process, designed for medium power amplifier and switching applications where high voltages are required.

**MARKING: FULL PART NUMBER**

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

Collector-Base Voltage  
Collector-Emitter Voltage  
Emitter-Base Voltage  
Continuous Collector Current  
Peak Collector Current  
Continuous Base Current  
Power Dissipation  
Operating and Storage Junction Temperature  
Thermal Resistance

SYMBOL	2N5758	2N5759	2N5760	UNITS
	2N6226	2N6227	2N6228	
$V_{CBO}$	100	120	140	V
$V_{CEO}$	100	120	140	V
$V_{EBO}$		7.0		V
$I_C$		6.0		A
$I_{CM}$		10		A
$I_B$		4.0		A
$P_D$		150		W
$T_J, T_{stg}$		-65 to +200		$^{\circ}\text{C}$
$\theta_{JC}$		1.17		$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	2N5758		2N5759		2N5760		UNITS
		2N6226		2N6227		2N6228		
$I_{CBO}$	$V_{CB}=\text{Rated } V_{CBO}$	-	1.0	-	1.0	-	1.0	mA
$I_{CEV}$	$V_{CE}=\text{Rated } V_{CEO}, V_{EB}=1.5\text{V}$	-	1.0	-	1.0	-	1.0	mA
$I_{CEV}$	$V_{CE}=\text{Rated } V_{CEO}, V_{EB}=1.5\text{V}, T_C=150^{\circ}\text{C}$	-	5.0	-	5.0	-	5.0	mA
$I_{CEO}$	$V_{CE}=\frac{1}{2}\text{Rated } V_{CEO}$	-	1.0	-	1.0	-	1.0	mA
$I_{EBO}$	$V_{EB}=7.0\text{V}$	-	1.0	-	1.0	-	1.0	mA
$BV_{CEO}$	$I_C=200\text{mA}$	100	-	120	-	140	-	V
$V_{CE(\text{SAT})}$	$I_C=3.0\text{A}, I_B=0.3\text{A}$	-	1.0	-	1.0	-	1.0	V
$V_{CE(\text{SAT})}$	$I_C=6.0\text{A}, I_B=1.2\text{A}$	-	2.0	-	2.0	-	2.0	V
$V_{BE(\text{ON})}$	$V_{CE}=2.0\text{V}, I_C=3.0\text{A}$	-	1.5	-	1.5	-	1.5	V
$h_{FE}$	$V_{CE}=2.0\text{V}, I_C=3.0\text{A}$	25	100	20	80	15	60	
$h_{FE}$	$V_{CE}=2.0\text{V}, I_C=6.0\text{A}$	5.0	-	5.0	-	5.0	-	
$h_{fe}$	$V_{CE}=10\text{V}, I_C=2.0\text{A}, f=1.0\text{kHz}$	15	-	15	-	15	-	
$f_T$	$V_{CE}=20\text{V}, I_C=0.5\text{A}, f=0.5\text{MHz}$	1.0	-	1.0	-	1.0	-	MHz
$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=100\text{kHz}$	-	300	-	300	-	300	pF

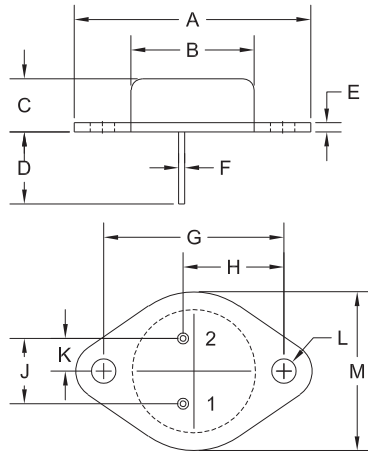
R1 (15-February 2013)

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**TO-3 CASE - MECHANICAL OUTLINE**



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	1.516	1.573	38.50	39.96
B (DIA)	0.748	0.875	19.00	22.23
C	0.250	0.450	6.35	11.43
D	0.433	0.516	11.00	13.10
E	0.054	0.065	1.38	1.65
F	0.035	0.045	0.90	1.15
G	1.177	1.197	29.90	30.40
H	0.650	0.681	16.50	17.30
J	0.420	0.440	10.67	11.18
K	0.205	0.225	5.21	5.72
L (DIA)	0.151	0.172	3.84	4.36
M	0.984	1.050	25.00	26.67

TO-3 (REV: R2)

R2

**LEAD CODE:**

- 1) Base
- 2) Emitter
- Case) Collector

**MARKING:**

**FULL PART NUMBER**

R1 (15-February 2013)