

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

**COMPLEMENTARY SILICON
POWER TRANSISTORS**



TO-3 CASE



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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		$^\circ\text{C}$
θ_{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		
		MIN	MAX	MIN	MAX	MIN	MAX	
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

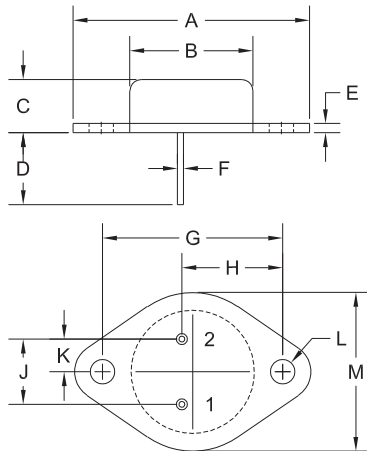
R1 (15-February 2013)

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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)