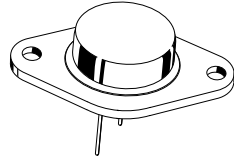


2N3766
2N3767

**NPN SILICON
POWER TRANSISTOR**



TO-66 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N3766, 2N3767 types are silicon NPN power transistors manufactured by the epitaxial base process designed for power amplifier and medium speed switching applications.

MARKING CODE: FULL PART NUMBER

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

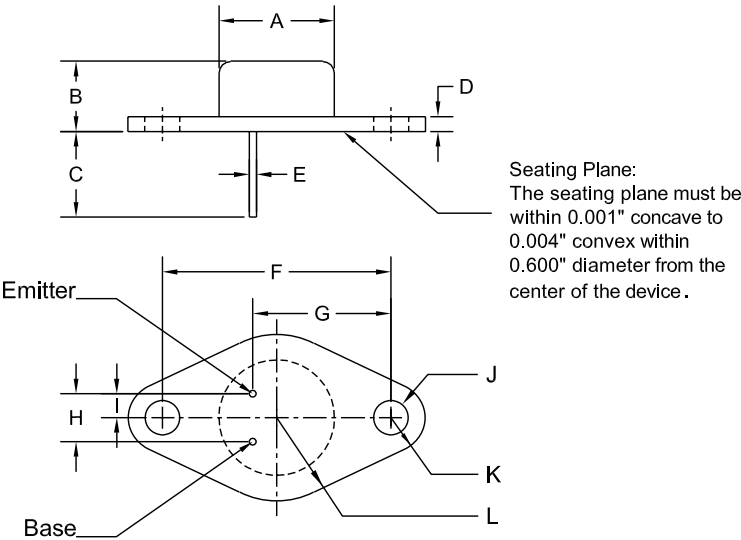
	SYMBOL	2N3766	2N3767	UNITS
Collector-Base Voltage	V_{CBO}	80	100	V
Collector-Emitter Voltage	V_{CEO}	60	80	V
Emitter-Base Voltage	V_{EBO}	6.0		V
Collector Current	I_C	4.0		A
Base Current	I_B	2.0		A
Power Dissipation	P_D	25		W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200		$^{\circ}\text{C}$
Thermal Resistance	Θ_{JC}	7.0		$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CEV}	$V_{CE}=\text{Rated } V_{CBO}, V_{BE}=1.5\text{V}$		10	μA
I_{CBO}	$V_{CB}=\text{Rated } V_{CBO}$		10	μA
I_{CEO}	$V_{CE}=\text{Rated } V_{CEO}$		500	μA
I_{EBO}	$V_{EB}=6.0\text{V}$		500	μA
BV_{CEO}	$I_C=100\text{mA}$ (2N3766)	60		V
BV_{CEO}	$I_C=100\text{mA}$ (2N3767)	80		V
$V_{CE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$		1.0	V
$V_{CE(SAT)}$	$I_C=1.0\text{A}, I_B=100\text{mA}$		2.5	V
$V_{BE(ON)}$	$V_{CE}=10\text{V}, I_C=1.0\text{A}$		1.5	V
h_{FE}	$V_{CE}=5.0\text{V}, I_C=50\text{mA}$	30		
h_{FE}	$V_{CE}=5.0\text{V}, I_C=500\text{mA}$	40	160	
h_{FE}	$V_{CE}=10\text{V}, I_C=1.0\text{A}$	20		
f_T	$V_{CE}=10\text{V}, I_C=500\text{mA}, f=10\text{MHz}$	10		MHz
C_{ob}	$V_{CB}=10\text{V}, I_C=0, f=100\text{KHz}$		50	pF

R1 (25-October 2007))

TO-66 CASE - MECHANICAL OUTLINE



R2

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.470	0.500	11.94	12.70
B	0.250	0.340	6.35	8.64
C	0.360	-	9.14	-
D	0.050	0.075	1.27	1.91
E (DIA)	0.028	0.034	0.71	0.86
F	0.958	0.962	24.33	24.43
G	0.570	0.590	14.48	14.99
H	0.190	0.210	4.83	5.33
I	0.093	0.107	2.36	2.72
J (DIA)	0.142	0.152	3.61	3.86
K (RAD)	0.145		3.68	
L (RAD)	0.350		8.89	

TO-66 (REV:R2)

MARKING CODE: FULL PART NUMBER

R1 (25-October 2007))