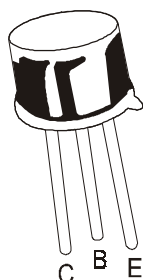


PNP SILICON PLANAR RF TRANSISTORS



2N3635
2N3636
2N3637

TO-39
Metal Can Package

2N3635 and 2N3637 Are PNP Silicon Transistors For High Voltage Switching and Low Power Amplifier.

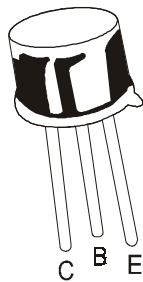
ABSOLUTE MAXIMUM RATINGS (Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	2N3635	2N3636, 37	UNITS
Collector Emitter Voltage	V_{CEO}	140	175	V
Collector Base Voltage	V_{CBO}	140	175	V
Emitter Base Voltage	V_{EBO}	5		V
Collector Current	I_C	1		A
Power Dissipation @ Ta=25°C	P_D	1		W
Derate Above 25°C		5.71		mW/°C
Power Dissipation@ Tc=25°C	P_D	5		W
Derate Above 25°C		28.6		mW/°C
Operating And Storage Junction Temperature Range	T_j, T_{stg}	-65 to +200		°C

ELECTRICAL CHARACTERISTICS (Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	MIN	MAX	UNITS
Collector Emitter Breakdown Voltage	$B_{V_{CEO}}^* I_C=10mA, I_B=0$			
2N3635		140		V
2N3636, 37		175		V
Collector Base Breakdown Voltage	$B_{V_{CBO}} I_C=100\mu A, I_E=0$			
2N3635		140		V
2N3636, 37		175		V
Emitter Base Breakdown Voltage	$B_{V_{EBO}} I_E=10\mu A, I_C=0$	5		V
Collector Leakage Current	$I_{CBO} V_{CB}=100V, I_E=0$		100	nA
Emitter Leakage Current	$I_{EBO} V_{EB}=3V, I_C=0$		50	nA
Collector Emitter Saturation Voltage	$V_{CE(sat)}^* I_C=10mA, I_B=1mA$ $I_C=50mA, I_B=5mA$		0.3 0.5	V V
Base Emitter Saturation Voltage	$V_{BE(sat)}^* I_C=10mA, I_B=1mA$ $I_C=50mA, I_B=5mA$		0.8 0.9	V V

PNP SILICON PLANAR RF TRANSISTORS



2N3635

2N3636

2N3637

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Metal Can Package

DESCRIPTION	SYMBOL	MIN	MAX	UNITS
DC Current Gain	h_{FE}	$I_C=2mA, V_{CE}=10V$		
2N 3635, 37		80		
2N3636		40		
		$I_C=1mA, V_{CE}=10V$		
2N 3635, 37		90		
2N3636		45		
		$I_C=10mA^*, V_{CE}=10V$		
2N 3635, 37		100		
2N3636		50		
		$I_C=50mA^*, V_{CE}=10V$		
2N 3635, 37		100	300	
2N3636		50	130	
		$I_C=150mA^*, V_{CE}=10V$		
2N 3635, 37		50		
2N3636		25		

SMALL SIGNAL CHARACTERISTICS (at $f=1MHz$ otherwise specified)

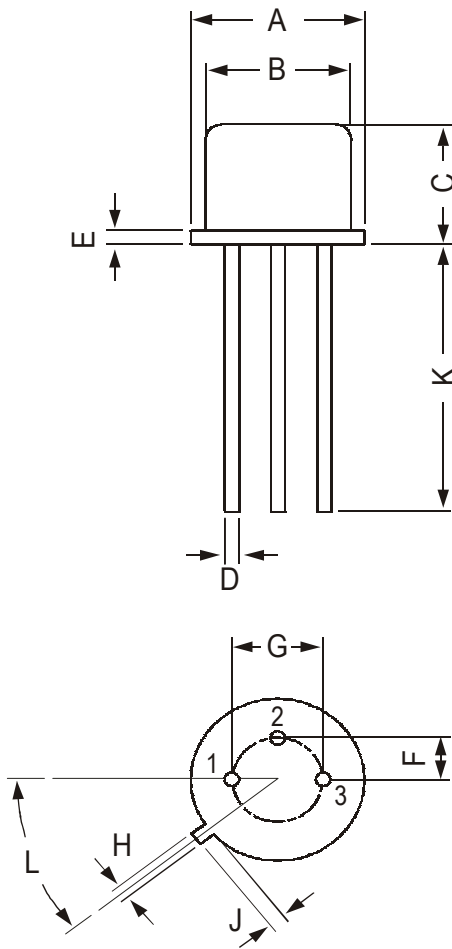
Transition Frequency	f_T	$I_C=30mA, V_{CE}=30V$ $f=100MHz$	200 150	MHz MHz
Current Gain	$ h_{fe} $	$I_C=10mA, V_{CE}=10V,$ $f=1kHz$	80 40	320 160
Input Impedence	h_{ie}	$I_C=10mA, V_{CE}=10V$	200 100	1200 600 Ω Ω
Reverse Voltage Feedback Ratio	h_{re}	$I_C=10mA, V_{CE}=10V$		3 $\times 10^{-4}$
Output Admittance	h_{oe}	$I_C=10mA, V_{CE}=10V$		200 UMHOS
Noise Figure	NF	$I_C=500mA, V_{CE}=10V,$ $R_s=1K\Omega$		
Output Capacitance	C_{ob}	$V_{CB}=20V, I_E=0, f=100KHz$	10	pF
Input Capacitance	C_{ib}	$V_{EB}=1V, I_C=0, f=100KHz$	75	pF
Turn on Time	t_{on}	$I_C=50mA, I_{B1}=I_{B2}=5mA$ $V_{CC}=100V, V_{BE}=4V$	400	ns
Turn off Time		$I_C=50mA, I_{B1}=I_{B2}=5mA$ $V_{CC}=100V, V_{BE}=4V$	600	ns

*Pulse Test: Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2\%$

2N3635
2N3636
2N3637

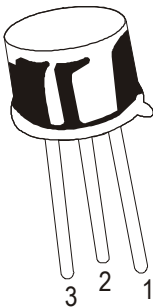
TO-39
Metal Can Package

TO-39 Metal Can Package



All dimensions are in mm

DIM	MIN	MAX
A	8.50	9.39
B	7.74	8.50
C	6.09	6.60
D	0.40	0.53
E	—	0.88
F	2.41	2.66
G	4.82	5.33
H	0.71	0.86
J	0.73	1.02
K	12.70	—
L	42 DEG	48 DEG



PIN CONFIGURATION
1. EMITTER
2. BASE
3. COLLECTOR

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-39	500 pcs/polybag	540 gm/500 pcs	3" x 7.5" x 7.5"	20K	17" x 15" x 13.5"	32K	40 kgs

Disclaimer

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