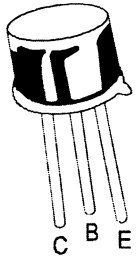




PNP SILICON HIGH VOLTAGE TRANSISTOR

2N 5415, 16



**TO-39
Metal Can Package**

High Speed Switching and Linear amplifier Appliances in Industrial and Commercial Equipment.

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

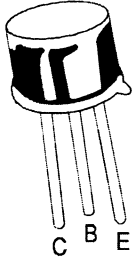
DESCRIPTION	SYMBOL	2N5415	2N5416	UNITS
Collector Emitter Voltage	V_{CEO}	200	300	V
Collector Base Voltage	V_{CBO}	200	350	V
Emitter Base Voltage	V_{EBO}	4	6	V
Collector Current Continuous	I_C	(-----1-----)		A
Base Current Continuous	I_B	(-----0.5-----)		A
Power Dissipation @ Ta=50°C	P_D	(-----1-----)		W
Derate Above 25°C				mW/°C
Power Dissipation@ Tc=25°C	P_D	(-----10-----)		W
Derate Above 25°C				
Junction Temperature	T_j	(-----200-----)		mW/°C
Operating And Storage Junction Temperature Range	T_{stg}		-65 to +200	°C

THERMAL RESISTANCE

Junction to Ambient	$R_{th(j-a)}$		150	°C/W
Junction to Case	$R_{th(j-c)}$		17.5	°C/W

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

DESCRIPTION	SYMBOL	TEST CONDITION	2N5415	2N5416	UNITS
Collector Emitter Breakdown Voltage	$BV_{CEO(sus)}^*$	$I_C=50mA, I_B=0$	>200	>300	V
Collector Cut off Current	I_{CBO}	$V_{CB}=175V, I_E=0$	<50		μA
		$V_{CB}=280V, I_E=0$		<50	μA
Collector Cutoff Current	I_{CEO}	$V_{CE}=150V, I_B=0$	<50		μA
		$V_{CE}=250V, I_B=0$		<50	μA
Emitter Cut off Current	I_{EBO}	$V_{EB}=4V, I_C=0$	<20		μA
		$V_{EB}=6V, I_C=0$		<20	μA
Collector Emitter Saturation Voltage	$V_{CE(Sat)}$	$I_C=50mA, I_B=5mA$	<2.5	<2	V
Base Emitter Saturation Voltage	$V_{BE(Sat)}$	$I_C=50mA, I_B=5mA$	<1.5	<1.5	V
DC Current Gain	h_{FE}^*	$I_C=50mA, V_{CE}=10V$	30-150	30-120	

PNP SILICON HIGH VOLTAGE TRANSISTOR**2N 5415, 16****TO-39
Metal Can Package****ELECTRICAL CHARACTERISTICS (Ta=25°C unless specified otherwise)**

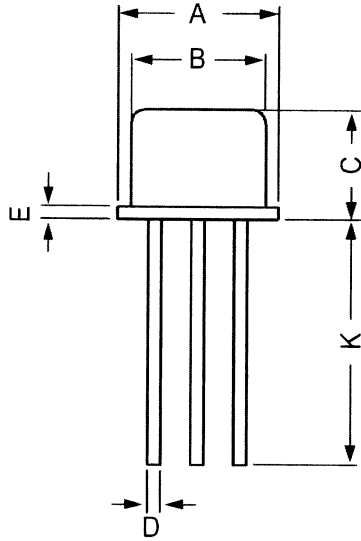
DESCRIPTION	SYMBOL	TEST CONDITION	2N5415/16	UNITS
<u>DYNAMIC CHARACTERISTICS</u>				
Small Signal Current Gain	$ h_{fe} $	$I_C=5\text{mA}$, $V_{CE}=10\text{V}$, $f=1\text{kHz}$	>25	
Transition Frequency	f_T	$I_C=10\text{mA}$, $V_{CE}=10\text{V}$ $f=5\text{MHz}$	>15	MHz
Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$	<15	pF
Input Capacitance	C_{ib}	$V_{EB}=V_{EBO\text{max}}$, $I_C=0$, $f=1\text{MHz}$	<75	pF

***Pulse Test: Pulse Width <300 μ s, Duty Cycle <2%**

2N 5415, 16

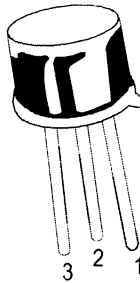
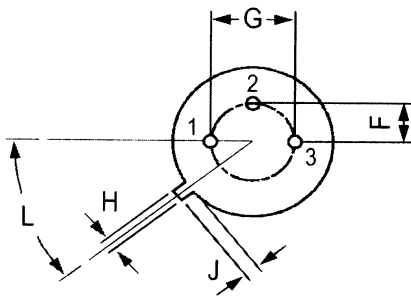
TO-39
Metal Can Package

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