



PRODUCT NAME : 2N5416 PNP General Purpose Transistor

PRICE : Rs 49.00

SKU : RM2095



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DESCRIPTION

Features

- Collector-Emitter Volt (V_{ce0}): 300V
- Collector-Base Volt (V_{cb0}): 350V
- Collector Current (I_c): 1.0A
- h_{fe} : 30-120 @ 50mA
- Power Dissipation (P_{tot}): 1000mW
- Current-Gain-Bandwidth (f_{total}): 15MHz
- Type: NPN



2N5415
2N5416

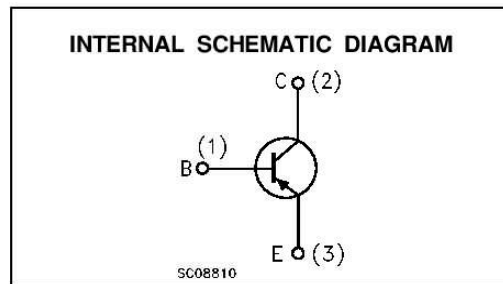
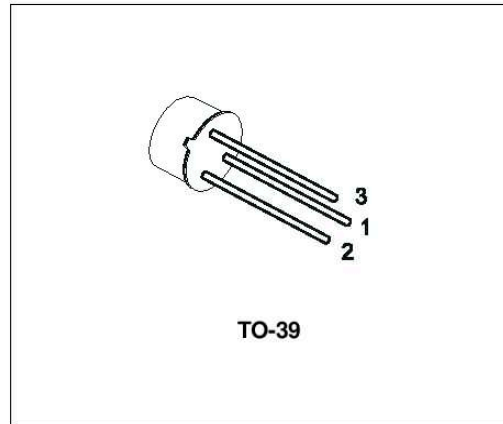
SILICON PNP TRANSISTORS

- SGS-THOMSON PREFERRED SALESTYPES
- PNP TRANSISTOR

DESCRIPTION

The 2N5415, 2N5416 are high voltage silicon epitaxial planar PNP transistors in Jedec TO-39 metal case designed for use in consumer and industrial line-operated applications.

These devices are particularly suited as drivers in high-voltage low current inverters, switching and series regulators.



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value		Unit
		2N5415	2N5416	
V _{CB0}	Collector-Base Voltage (I _E = 0)	-200	-350	V
V _{CE0}	Collector-Emitter Voltage (I _B = 0)	-200	-300	V
V _{EB0}	Emitter-Base Voltage (I _C = 0)	-4	-6	V
I _C	Collector Current	-1		A
I _B	Base Current	-0.5		A
P _{tot}	Total Dissipation at T _c ≤ 25 °C	10		W
P _{tot}	Total Dissipation at T _{amb} ≤ 50 °C	1		W
T _{stg}	Storage Temperature	-65 to 200		°C
T _j	Max. Operating Junction Temperature	200		°C

2N5415 / 2N5416

THERMAL DATA

R _{thj-case}	Thermal Resistance Junction-case	Max	17.5	°C/W
R _{thj-amb}	Thermal Resistance Junction-ambient	Max	175	°C/W

ELECTRICAL CHARACTERISTICS (T_{case} = 25 °C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I _{CBO}	Collector Cut-off Current (I _E = 0)	for 2N5415 V _{CB} = -175 V for 2N5416 V _{CB} = -280 V			-50 -50	μA μA
I _{CEO}	Collector Cut-off Current (I _B = 0)	V _{CE} = -150 V			-50	μA
I _{EBO}	Emitter Cut-off Current (I _C = 0)	for 2N5415 V _{EB} = -4 V for 2N5416 V _{EB} = -6 V			-20 -20	μA μA
V _{CEER*}	Collector-Emitter Sustaining Voltage	I _C = -50 mA R _{BE} = 50Ω for 2N5416	-350			V
V _{CEO(sus)*}	Collector-Emitter Sustaining Voltage	I _C = -10 mA for 2N5415 for 2N5416	-200 -300			V V
V _{CE(sat)*}	Collector-Emitter Saturation Voltage	I _C = -50 mA I _B = -5 mA			-2.5	V
V _{BE*}	Base-Emitter Voltage	I _C = -50 mA V _{CE} = -10 V			-1.5	V
h _{FE*}	DC Current Gain	I _C = -50 mA V _{CE} = -10 V for 2N5415 for 2N5416	30 30		150 120	
h _{fe}	Small Signal Current Gain	I _C = -5 mA V _{CE} = -10 V f = 1KHz	25			
f _T	Transition frequency	I _C = -10 mA V _{CE} = -10 V f = 5MHz	15			MHz
C _{CBO}	Collector Base Capacitance	I _E = 0 V _{CB} = -10 V f = 1MHz			25	pF

* Pulsed: Pulse duration = 300 μs, duty cycle 1.5 %

