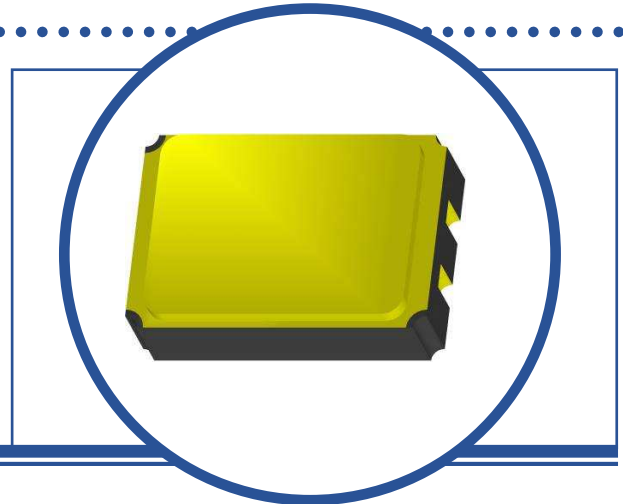


SILICON PLANAR EPITAXIAL PNP TRANSISTOR

2N5415CSM4
2N5416CSM4

- Silicon Planar PNP Transistor
- Hermetic Ceramic Surface Mounted Package.
- Hi-Rel Screening Options Available



ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise stated)

		2N5415	2N5416
V _{CBO}	Collector – Base Voltage	-200V	-350V
V _{CEO}	Collector – Emitter Voltage	-200V	-300V
V _{EBO}	Emitter – Base Voltage	-4V	-6V
I _C	Continuous Collector Current		1.0A
I _B	Base Current		0.5A
P _D	Total Power Dissipation at T _A = 25°C		1.0W
T _J	Junction Temperature Range		175°C
T _{stg}	Storage Temperature Range		-65 to +200°C

THERMAL PROPERTIES (Each Device)

Symbols	Parameters	Max.	Units
R _{θJA}	Thermal Resistance, Junction To Ambient	150	°C/W

Semelab Limited reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.



SILICON PLANAR EPITAXIAL PNP TRANSISTOR 2N5415CSM4, 2N5416CSM4

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise stated)

Symbols	Parameters	Test Conditions	Min.	Typ.	Max.	Units
V _{(BR)CEO} ⁽¹⁾	Collector-Emitter Breakdown Voltage	I _C = -10mA 2N5415	-200			V
		I _C = -10mA 2N5416	-300			
V _{(BR)CER} ⁽¹⁾	Collector-Emitter Breakdown Voltage	R _{BE} = 50Ω I _C = -50mA 2N5416	-350			
I _{CEO} ⁽¹⁾	Collector Cut-off Current	I _B = 0 V _{CE} = -150V			-50	μA
I _{CBO} ⁽¹⁾	Collector-Base Cut-off Current	V _{CB} = -175V 2N5415			-50	
		V _{CB} = -280V 2N5416			-50	
I _{EBO} ⁽¹⁾	Emitter Cut-off Current	V _{EB} = -4V 2N5415			-20	
		V _{EB} = -6V 2N5416			-20	
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -50mA I _B = -5mA			-0.5	V
V _{BE} ⁽¹⁾	Base-Emitter Voltage	I _C = -50mA V _{CE} = -10V			-1.5	
h _{FE} ⁽¹⁾	DC Current Gain	I _C = -50mA V _{CE} = -10V 2N5415	30		150	-
		I _C = -50mA V _{CE} = -10V 2N5416	30		120	

DYNAMIC CHARACTERISTICS

Symbols	Parameters	Test Conditions	Min.	Typ.	Max.	Units
f _T	Transition Frequency	I _C = -10mA V _{CE} = -10V f = 5MHz	15			MHz
C _{obo}	Output Capacitance	V _{CB} = -10V I _E = 0 f = 1.0MHz			25	pF
h _{fe}	Small Signal Current Gain	I _C = -5mA V _{CE} = -10V f = 1.0kHz	25			-

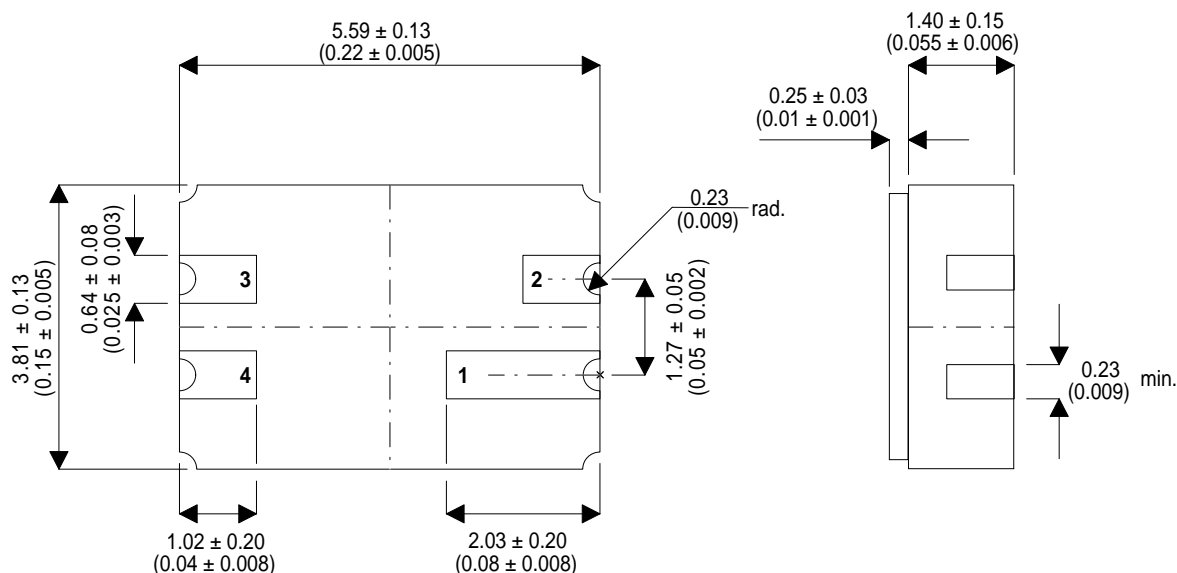
Notes

(1) Pulse Width ≤ 300μs, δ ≤ 2%

SILICON PLANAR EPITAXIAL PNP TRANSISTOR 2N5415CSM4, 2N5416CSM4

MECHANICAL DATA

Dimensions in mm (inches)



LCC3 (MO-041BA)

Underside View

PAD 1 – Collector PAD 3 – Emitter
PAD 2 – N/C PAD 4 – Base