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Manufacturers of World Class Discrete Semiconductors

2N656
2N657

NPN SILICON TRANSISTOR

JEDEC TO-39 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N656, 2N657 types are Silicon NPN Epitaxial Planar Transistors designed for general purpose applications.

MAXIMUM RATINGS (T_A = 25°C)

	SYMBOL	2N656	2N657	UNITS
Collector-Base Voltage	V _{CB0}	60	100	V
Collector-Emitter Voltage	V _{CEO}	60	100	V
Emitter-Base Voltage	V _{EBO}	8.0	8.0	V
Collector Current	I _C	1.0	0.5	A
Power Dissipation	P _D		1.0	W
Power Dissipation (T _C = 25°C)	P _D		4.0	W
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +200		°C
Thermal Resistance	θ _{JA}	175		°C/W
Thermal Resistance	θ _{JC}	43.75		°C/W

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

SYMBOL	TEST CONDITIONS	2N656		2N657		UNITS
		MIN	MAX	MIN	MAX	
I _{CBO}	V _{CB} = 30V		10		10	μA
BV _{CB0}	I _C = 100μA	60		100		V
BV _{CEO}	I _C = 250μA	60		100		V
BV _{EBO}	I _E = 250μA	8.0		8.0		V
V _{CE(SAT)}	I _C = 200mA, I _B = 40mA		4.0		4.0	V
h _{FE}	V _{CE} = 10V, I _C = 200mA	30	90	30	90	
h _{ie}	V _{CE} = 10V, I _B = 8.0mA		0.5		0.5	kΩ