

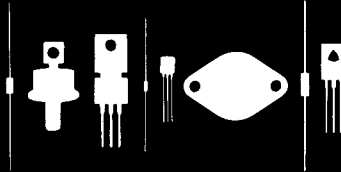
Central
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145 Adams Avenue
Hauppauge, New York 11788



2N5655
2N5656
2N5657

NPN SILICON POWER TRANSISTOR

JEDEC TO-126 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N5655 series types are silicon NPN plastic power transistors manufactured by the epitaxial planar process designed for horizontal driver and high voltage amplifier and switching applications.

MAXIMUM RATINGS ($T_C=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL	2N5655	2N5656	2N5657	UNIT
Collector-Base Voltage	V _{CB0}	275	325	375	V
Collector-Emitter Voltage	V _{CEO}	250	300	350	V
Emitter-Base Voltage	V _{EB0}		6.0		V
Collector Current	I _C		500		mA
Collector Current (Peak)	I _{CM}		1.0		A
Base Current	I _B		250		mA
Power Dissipation	P _D		20		W
Operating and Storage Junction Temperature	T _J , T _{STG}		-65 TO +150		°C
Thermal Resistance	θ _{JC}		6.25		°C/W

ELECTRICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N5655		2N5656		2N5657		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
I _{CB0}	V _{CB} =Rated V _{CB0}		10		10		10	μA
I _{CEO}	V _{CE} =150V		0.1		-		-	mA
I _{CEO}	V _{CE} =200V		-		0.1		-	mA
I _{CEO}	V _{CE} =250V		-		-		0.1	mA
I _{CEV}	V _{CE} =Rated V _{CB0} , V _{EB} =1.5V		0.1		0.1		0.1	mA
I _{CEV}	V _{CE} =150V, V _{EB} =1.5V, T _C =100°C		1.0		-		-	mA
I _{CEV}	V _{CE} =200V, V _{EB} =1.5V, T _C =100°C		-		1.0		-	mA
I _{CEV}	V _{CE} =250V, V _{EB} =1.5V, T _C =100°C		-		-		1.0	mA
I _{EBO}	V _{EB} =6.0V		10		10		10	μA
BV _{CEO}	I _C =1.0mA	250		300		350		V
BV _{CEO}	I _C =100mA	250		300		350		V
V _{CE} (SAT)	I _C =100mA, I _B =10mA		1.0		1.0		1.0	V
V _{CE} (SAT)	I _C =250mA, I _B =25mA		2.5		2.5		2.5	V
V _{CE} (SAT)	I _C =500mA, I _B =100mA		10		10		10	V
V _{BE} (ON)	V _{CE} =10V, I _C =100mA		1.0		1.0		1.0	V
h _{FE}	V _{CE} =10V, I _C =50mA	25		25		25		
h _{FE}	V _{CE} =10V, I _C =100mA	30	250	30	250	30	250	
h _{FE}	V _{CE} =10V, I _C =250mA	15		15		15		
h _{FE}	V _{CE} =10V, I _C =500mA	5.0		5.0		5.0		
h _{fe}	V _{CE} =10V, I _C =100mA, f=1.0kHz	20		20		20		
f _T	V _{CE} =10V, I _C =50mA, f=10MHz	10		10		10		MHz
C _{ob}	V _{CB} =10V, I _E =0, f=100kHz		25		25		25	pF