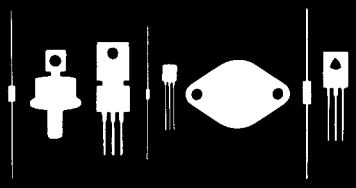
Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, New York 11788



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°C unless otherwise noted)

	SYMBOL	2N5655	2N5656	2N5657	UNIT
Collector-Base Voltage	V_{CBO}	275	325	375	V
Collector-Emitter Voltage	V_{CEO}	250	300	350	V
Emitter-Base Voltage	V_{EBO}		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°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N5655 MIN	2N5655 MAX	2N5656 MIN	2N5656 MAX	2N5657 MIN	2N5657 MAX	UNIT
I_{CBO}	V_{CB}=Rated V_{CBO}		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_{CBO}, 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

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