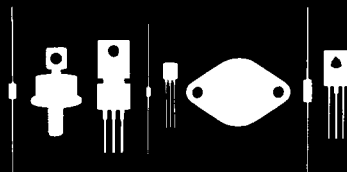


Central
Semiconductor Corp.
Central
Semiconductor Corp.
Central
Semiconductor Corp.
CentralTM
Semiconductor Corp.

145 Adams Avenue
Hauppauge, New York 11788



2N2152 THRU 2N2154
2N2156 THRU 2N2158

GERMANIUM PNP POWER TRANSISTOR
170 WATTS

JEDEC TO-36 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N2152, 2N2156 Series types are Germanium Alloy PNP Power Transistors designed for high power, high gain industrial applications.

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

	SYMBOL	2N2152 2N2156	2N2153 2N2157	2N2154 2N2158	UNIT
Collector-Base Voltage	V_{CB0}	45	60	75	V
Collector-Emitter Voltage	V_{CES}	45	60	75	V
Collector-Emitter Voltage	V_{CE0}	30	45	60	V
Emitter-Base Voltage	V_{EB0}	25	30	40	V
Collector Current	I_C	30	30	30	A
Power Dissipation	P_D	170	170	170	W
Operating and Storage					
Junction Temperature	T_J, T_{stg}		-65 TO +110		$^{\circ}\text{C}$
Thermal Resistance, Junction To Case	θ_{JC}	0.5	0.5	0.5	$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	2N2152 2N2156		2N2153 2N2157		2N2154 2N2158		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
I_{CB0}	$V_{CB}=2.0\text{V}$		0.2		0.2		0.2	mA
I_{CB0}	$V_{CB}=\text{Rated } V_{CB0}$		4.0		4.0		4.0	mA
I_{CB0}	$V_{CB}=\text{Rated } V_{CB0}, T_C=71^{\circ}\text{C}$		15		15		15	mA
I_{EB0}	$V_{EB}=\text{Rated } V_{EB0}$		4.0		4.0		4.0	mA
I_{EB0}	$V_{EB}=\text{Rated } V_{EB0}, T_C=71^{\circ}\text{C}$		15		15		15	mA
BV_{CES}	$I_C=300\text{mA}$	45		60		75		V
BV_{CE0}	$I_C=1.0\text{A}$	30		45		60		V
V_{EBF}	$V_{CB}=\text{Rated } V_{CB0}$		1.0		1.0		1.0	V
$V_{CE(\text{SAT})}$	$I_C=5.0\text{A}, I_B=500\text{mA}$		0.1		0.1		0.1	V
$V_{CE(\text{SAT})}$	$I_C=25\text{A}, I_B=2.0\text{A}$		0.3		0.3		0.3	V
$V_{BE(\text{SAT})}$	$I_C=5.0\text{A}, I_B=500\text{mA}$		1.0		1.0		1.0	V
$V_{BE(\text{SAT})}$	$I_C=25\text{A}, I_B=2.0\text{A}$		2.0		2.0		2.0	V
h_{FE}	$V_{CE}=2.0\text{V}, I_C=5.0\text{A}$ (2N2152, 2N2153, 2N2154 ONLY)	50	100	50	100	50	100	
h_{FE}	$V_{CE}=2.0\text{V}, I_C=5.0\text{A}$ (2N2156, 2N2157, 2N2158 ONLY)	80	160	80	160	80	160	
h_{FE}	$V_{CE}=2.0\text{V}, I_C=15\text{A}$ (2N2152, 2N2153, 2N2154 ONLY)	25	-	25	-	25	-	
h_{FE}	$V_{CE}=2.0\text{V}, I_C=15\text{A}$ (2N2156, 2N2157, 2N2158 ONLY)	40	-	40	-	40	-	
h_{FE}	$V_{CE}=2.0\text{V}, I_C=25\text{A}$ (ALL TYPES)	15	-	15	-	15	-	
$f_{\alpha e}$	$V_{CE}=6.0\text{V}, I_C=5.0\text{A}$	2.0	-	2.0	-	2.0	-	kHz

145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824