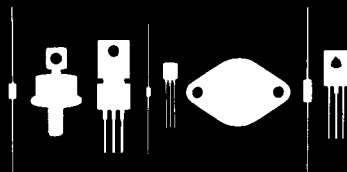


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145 Adams Avenue
Hauppauge, New York 11788



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_{CEO}	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_{CEO}	$I_C=1.0\text{A}$	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