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NTE2682 (NPN) & NTE2683 (PNP) Silicon Complementary Darlington Transistors Audio Power Output TO3PL Type Package

Features:

- High Forward Current Transfer Ratio, h_{FE}
- Low Collector-Emitter Saturation Voltage, $V_{CE(sat)}$
- Optimum for 120W HiFi Output Applications

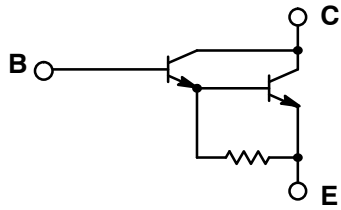
Absolute Maximum Ratings: ($T_C = +25^\circ C$ unless otherwise specified)

Collector-Base Voltage, V_{CBO}	160V
Collector-Emitter Voltage, V_{CEO}	160V
Emitter-Base Voltage, V_{EBO}	5V
Collector Current, I_C	
Continuous	8A
Peak	15A
Collector Power Dissipation, P_D	
$T_C = +25^\circ C$	150W
$T_A = +25^\circ C$	3.5W
Operating Junction Temperature, T_J	+150°C
Storage Temperature Range, T_{stg}	-55° to +150°C

Electrical Characteristics: ($T_C = +25^\circ C$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Emitter Voltage	V_{CEO}	$I_C = 30mA, I_B = 0$	160	-	-	V
Collector-Base Cutoff Current	I_{CBO}	$V_{CB} = 160V, I_E = 0$	-	-	100	°A
Emitter-Base Cutoff Current	I_{CEO}	$V_{CE} = 160V, I_B = 0$	-	-	100	°A
Emitter-Base Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	-	-	100	°A
Forward Current Transfer Ratio	h_{FE}	$V_{CE} = 5V, I_C = 1A$	1000	-	-	
		$V_{CE} = 5V, I_C = 7A$	3500	-	20000	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 7A, I_B = 7mA$	-	-	3.0	V
Transition Frequency	f_T	$V_{CE} = 10V, I_C = 0.5A, f = 30MHz$	-	20	-	MHz
Turn-On Time NTE2682	t_{on}	$I_C = 7A, I_{B1} = -I_{B1} = 7mA,$ $V_{CC} = 50V$	-	2.0	-	°s
			-	1.0	-	°s
Storage Time NTE2682	t_{stg}		-	6.0	-	°s
			-	1.5	-	°s
Fall Time	t_f		-	1.2	-	°s
			-	1.2	-	°s

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