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2N6548
2N6549

NPN SILICON DARLINGTON TRANSISTORS

TO-202 CASE

MAXIMUM RATINGS ($T_A=25°C$ unless otherwise noted)

	SYMBOL		UNIT
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CES}	40	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	12	V
Collector Current	I_C	2.0	A
Base Current	I_B	100	mA
Power Dissipation	P_D	2.0	W
Power Dissipation ($T_C=25°C$)	P_D	10	W
Operating and Storage Junction Temperature	T_J, T_{STG}	-65 TO +150	°C
Thermal Resistance	Θ_{JA}	62.5	°C/W
Thermal Resistance	Θ_{JC}	12.5	°C/W

ELECTRICAL CHARACTERISTICS ($T_A=25°C$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N6548 MIN	2N6548 MAX	2N6549 MIN	2N6549 MAX	UNIT
I_{CBO}	$V_{CB}=30V$		100		100	nA
I_{EBO}	$V_{EB}=10V$		100		100	nA
BV_{CBO}	$I_C=100\mu A$	50		50		V
BV_{CES}	$I_C=100\mu A$	40		40		V
BV_{EBO}	$I_E=10\mu A$	12		12		V
$V_{CE(SAT)}$	$I_C=1.0A$, $I_B=2.0mA$		1.5		1.5	V
$V_{CE(SAT)}$	$I_C=2.0A$, $I_B=4.0mA$		2.0		2.0	V
$V_{BE(SAT)}$	$I_C=1.0A$, $I_B=2.0mA$		2.0		2.0	V
$V_{BE(ON)}$	$V_{CE}=5.0V$, $I_C=1.0A$		2.0		2.0	V
h_{FE}	$V_{CE}=5.0V$, $I_C=200mA$	25,000	150,000	15,000	150,000	
h_{FE}	$V_{CE}=5.0V$, $I_C=500mA$	15,000		10,000		
h_{FE}	$V_{CE}=5.0V$, $I_C=1.0A$	5,000		3,000		
h_{fe}	$V_{CE}=5.0V$, $I_C=50mA$, $f=1.0kHz$	20,000		15,000		
f_T	$V_{CE}=5.0V$, $I_C=200mA$, $f=100MHz$	100		100		MHz
C_{ob}	$V_{CB}=10V$, $I_E=0$, $f=1.0MHz$		7.0		7.0	pF

Quality Semi-Conductors