New Jersey Semi-Conductor Products, Inc.

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Silicon NPN Power Transistors

2N6358

DESCRIPTION

·With TO-3 package
·High DC current gain
·DARLINGTON

APPLICATIONS

·For general-purpose amplifier and low-frequency switching applications

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings(Ta=)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	80	V
V_{CEO}	Collector-emitter voltage	Open base	60	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		20	A
I_B	Base current		0.5	A
P_D	Total Power Dissipation	T_C=25_	150	W
T_j	Junction temperature		200	
T_{stg}	Storage temperature		-65~200	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance junction to case	1.09	/W

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Quality Semi-Conductors

CHARACTERISTICS

Tj=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdwon voltage	I_C=0.2A ;I_B=0	60			V
$V_{CEsat-1}$	Collector-emitter saturation voltage	I_C=10A ;I_B=40mA			2.0	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	I_C=20A ;I_B=1A			4.0	V
$V_{BE\ sat}$	Base-emitter saturation voltage	I_C=20A ;I_B=1A			4.0	V
V_{BE}	Base-emitter on voltage	I_C=10A ; V_{CE}=4V			2.8	V
I_{CEO}	Collector cut-off current	V_{CE}=60V;I_B=0			1.0	mA
I_{CBO}	Collector cut-off current	V_{CB}=80V; I_E=0			0.5	mA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			5.0	mA
h_{FE-1}	DC current gain	I_C=4A ; V_{CE}=5V	1500		10000	
h_{FE-2}	DC current gain	I_C=20A ; V_{CE}=5V	100