

1301-1201

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PG1338
thru
PG1346

10 AMP NPN PLANAR

TO-18

90 MHz (typical)

16 WATTS @ 100°C

MAXIMUM RATINGS @ 25°C

RATING	PG1338 PG1341 PG1344	PG1339 PG1342 PG1345	PG1340 20-60 PG1343 40-120 PG1346 100-300	UNIT
Collector-Base Voltage	70	80	120	Volts
Emitter-Base Voltage	6	6	6	Volts
Collector-Emitter Voltage	50	70	100	Volts
Collector Current	10	10	10	Amps
Base Current	2	2	2	Amps
Thermal Resistance, θ_{jc}	2.5	2.5	2.5	°C/W
Dissipation @ 100°C Case	40	40	40	Watts
Operating Junction Temperature		-65 to 200		°C
Storage Temperature Range		-65 to 200		°C

ELECTRICAL CHARACTERISTICS @ 25°C

SYMBOL	CONDITIONS	TYPES	LIMIT MIN. MAX.	UNIT
h_{FE}^*	$I_C = 5A, V_{CE} = 5V$	PG1338 PG1339 PG1340 PG1341 PG1342 PG1343 PG1344 PG1345 PG1346	20 60 40 120 100 300	
	$I_C = 10A, V_{CE} = 5V$	PG1338 PG1339 PG1340 PG1341 PG1342 PG1343 PG1344 PG1345 PG1346	10 15 20	

PG-1338-1X

ELECTRICAL CHARACTERISTICS @ 25°C

SYMBOL	CONDITIONS	TYPES	LIMIT		UNIT
			MIN.	MAX	
	$I_C = 5A, V_{CE} = 5V, T_C = -55^\circ C$	PG1338 PG1339 PG1340 PG1341 PG1342 PG1343 PG1344 PG1345 PG1346	10 15 20		
$V_{CE(sat)}^*$	$I_C = 5A, I_B = 0.5A$	All		0.6	Volts
V_{BE}^*	$I_C = 5A, V_{CE} = 5V$	All		2.0	Volts
BV_{CBO}	$I_C = 10\mu A, I_E = 0$	PG1338 PG1341 PG1344 PG1339 PG1342 PG1345 PG1340 PG1343 PG1346	70 80 120		Volts
$BV_{CEO(sus)}^*$	$I_C = 100mA, I_B = 0$	PG1338 PG1341 PG1344 PG1339 PG1342 PG1345 PG1340 PG1343 PG1346	50 70 100		Volts
BV_{EBO}	$I_E = 10\mu A, I_C = 0$	All	6		Volts
I_{CEX}	$V_{BE} = -0.5V, V_{CE} = BV_{CBO}$	All		10	μA
	$V_{BE} = -0.5V, V_{CE} = 50V, T_C = 150^\circ$	All		100	μA
I_{CBO}	$V_{CB} = 50V, I_E = 0$	All		10	μA

PG--1338-2X

ELECTRICAL CHARACTERISTICS @ 25°C (Continued)

SYMBOL	CONDITIONS	TYPES	LIMIT		UNIT
			MIN.	MAX.	
I_{CEO}	$V_{CE} = 30V, I_B = 0$	All		100	μA
I_{EBO}	$V_{EB} = 6V, I_C = 0$	All		10	μA
$ h_{fe} $	$V_{CE} = 10V, I_C = 1A, f = 10 \text{ MHz}$	All	1.0		
C_{ob}	$V_{CB} = 10V, f = 1 \text{ MHz}$	All		350	pf

*Pulse measurement: $PW \leq 330 \mu\text{sec}$; $\leq 2\%$ duty cycle.

PG-1338-3X