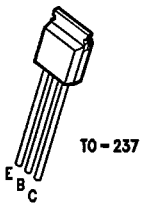
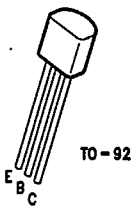
T-33-17

National Semiconductor

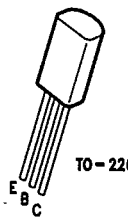
2N6727 PN6727 MPS6727



TL/G/10100-8



TL/G/10100-1



TL/G/10100-4

PNP General Purpose Amplifier

Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage (I_C = 10 mAdc, I_B = 0)	40		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage (I_C = 100 μAdc, I_E = 0)	50		Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage (I_E = 100 μAdc, I_C = 0)	5.0		Vdc
I_{CBO}	Collector Cutoff Current (V_{CB} = 50 Vdc, I_E = 0)		0.1	μAdc
I_{EBO}	Emitter Cutoff Current (V_{EB} = 5.0 Vdc, I_C = 0)		0.1	μAdc
ON CHARACTERISTICS (Note 1)				
h_{FE}	DC Current Gain (I_C = 100 mAdc, V_{CE} = 1.0 Vdc) (I_C = 1000 mAdc, V_{CE} = 1.0 Vdc)	 60 50	 250	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage (I_C = 1000 mAdc, I_B = 100 mAdc)		0.5	Vdc
$V_{BE(on)}$	Base-Emitter On Voltage (I_C = 1000 mAdc, V_{CE} = 1.0 Vdc)		1.2	Vdc
SMALL-SIGNAL CHARACTERISTICS				
C_{cb}	Collector-Base Capacitance (V_{CB} = 10 Vdc, I_E = 0, f = 1.0 MHz)		30	pF
h_{fe}	Small-Signal Current Gain (I_C = 50 mAdc, V_{CE} = 10 Vdc, f = 20 MHz)	2.5	25	

Note 1: Pulse Test: Pulse Width ≤ 300 μs, Duty Cycle ≤ 2.0%.

Note 2: For characteristics curves, see Process 78.

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