Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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Microsemi LAWRENCE

TECHNICAL DATA

MULTIPLE (QUAD) PNP SILICON SWITCHING TRANSISTOR

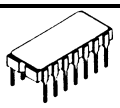
Qualified per MIL-PRF-19500/558

Devices		*Qualified Level*
2N6987 **2N6987U**	**2N6988**	**JAN** **JANTX** **JANTXV** **JANS**

MAXIMUM RATINGS (1)

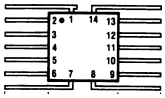
Ratings		Symbol	Value	Units
Collector-Emitter Voltage (4)		V_{CEO}	60	Vdc
Collector-Base Voltage (4)		V_{CBO}	60	Vdc
Emitter-Base Voltage (4)		V_{EBO}	5.0	Vdc
Collector Current		I_C	600	mAdc
Total Power Dissipation	@ T_A = +25^{0}C 2N6987 (2) 2N6987U (2) 2N6988 (3)	P_T	 1.5 1.0 0.4	W
Operating & Storage Junction Temperature Range		T_{op}, T_{stg}	-65 to +200	^{0}C

1) Maximum voltage between transistors shall be ≥ 500 Vdc
2) Derate linearly 8.57 mW/^{0}C above T_A = +25^{0}C
3) Derate linearly 2.286 mW/^{0}C above T_A = +25^{0}C.
4) Ratings apply to each transistor in the array.



2N6987*
TO- 116

2N6987U*
20 PIN LEADLESS



2N6988*
14 PIN FLAT PACK

*See appendix A for package outline

ELECTRICAL CHARACTERISTICS (T_A = 25^{0}C unless otherwise noted)

Characteristics	Symbol	Min.	Max.	Unit
OFF CHARACTERISTICS				
Collector-Emitter Breakdown Voltage I_C = 10 mAdc	$V_{(BR)CEO}$	60		Vdc
Collector-Base Cutoff Current V_{CB} = 60 Vdc V_{CB} = 50 Vdc	I_{CBO}		 10 10	 µAdc ηAdc
Emitter-Base Cutoff Current V_{BE} = 5.0 Vdc V_{EB} = 3.5 Vdc	I_{EBO}		 10 50	 µAdc ηAdc

ELECTRICAL CHARACTERISTICS (con't)

Characteristics	Symbol	Min.	Max.	Unit
ON CHARACTERISTICS				
Forward-Current Transfer Ratio				
I_C = 0.1 mAdc, V_{CE} = 10 Vdc	h_{FE}	75		
I_C = 1.0 mAdc, V_{CE} = 10 Vdc		100	450	
I_C = 10 mAdc, V_{CE} = 10 Vdc		100		
I_C = 150 mAdc, V_{CE} = 10 Vdc		100	300	
I_C = 500 mAdc, V_{CE} =10 Vdc		50		
Collector-Emitter Saturation Voltage				
I_C = 150 mAdc, I_B = 15 mAdc	$V_{CE(sat)}$		0.4	
I_C = 500 mAdc, I_B = 50 mAdc			1.6	Vdc
Base-Emitter Voltage				
I_C = 150 mAdc, I_B = 15 mAdc	$V_{BE(sat)}$		1.3	Vdc
I_C = 500 mAdc, I_B = 50 mAdc			2.6	
DYNAMIC CHARACTERISTICS				
Magnitude of Small-Signal Short-Circuit Forward-Current Transfer Ratio I_C = 50 mAdc, V_{CE} = 20 Vdc, f = 100 MHz	$\lvert h_{fe} \rvert$	2.0	8.0	
Small-Signal Short-Circuit Forward Current Transfer Ratio I_C = 1.0 mAdc, V_{CE} = 10 Vdc, f = 1.0 kHz	h_{fe}	100		
Output Capacitance V_{CB} = 10 Vdc, I_E = 0, 100 kHz ≤ f ≤ 1.0 MHz	C_{obo}		8.0	pF
Input Capacitance V_{EB} = 2.0 Vdc, I_C = 0, 100 kHz ≤ f ≤ 1.0 MHz	C_{ibo}		30	pF