Microsemi LAWRENCE

TECHNICAL DATA

PNP SILICON SWITCHING TRANSISTOR

Qualified per MIL-PRF-19500/348

Devices		*Qualified Level*
2N3467	**2N3468**	**JAN**
2N3467L	**2N3468L**	**JANTX**
		JANTXV

MAXIMUM RATINGS

Ratings	Symbol	2N3467 2N3467L	2N3468 2N3468L	Unit
Collector-Emitter Voltage	V_{CEO}	40	50	Vdc
Collector-Base Voltage	V_{CBO}	40	50	Vdc
Emitter-Base Voltage	V_{EBO}	5.0		Vdc
Collector Current	I_C	1.0		Adc
Total Power Dissipation @ $T_A = +25^0C$(1) @ $T_C = +25^0C$(2)	P_T	1.0 5.0		W W
Operating & Storage Junction Temperature Range	T_{op}, T_{stg}	-55 to +175		^0C

1) Derate linearly 5.71 mW/^{0}C for $T_A > +25^0C$
2) Derate linearly 28.6 mW/^{0}C for $T_C > +25^0C$

TO-39* (TO-205AD)
2N3467, 2N3468

TO-5*
2N3467L, 2N3468L

*See appendix A for package outline

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min.	Max.	Unit
OFF CHARACTERISTICS				
Collector-Emitter Breakdown Current I_C = 10 mAdc 2N3467, L 2N3468, L	$V_{(BR)CBO}$	40 50		Vdc
Emitter-Base Breakdown Current I_E = 10 μAdc	$V_{(BR)EBO}$	5.0		Vdc
Collector-Emitter Breakdown Current I_C = 10 mAdc 2N3467, L 2N3468, L	$V_{(BR)CEO}$	40 50		Vdc
Collector-Base Cutoff Current V_{CB} = 30 Vdc	I_{CBO}		100	ηAdc
Collector-Emitter Cutoff Current V_{EB} = 3.0 Vdc, V_{CE} = 30	I_{CEX}		100	nAdc

ELECTRICAL CHARACTERISTICS (con't)

Characteristics		Symbol	Min.	Max.	Unit
ON CHARACTERISTICS (3)					
Forward-Current Transfer Ratio					
I_C =150 mAdc, V_{CE} = 1.0 Vdc	2N3467, L	h_{FE}	40		
	2N3468, L		25		
I_C = 500 mAdc, V_{CE} = 1.0 Vdc	2N3467, L		40	120	
	2N3468, L		25	75	
I_C = 1.0 Adc, V_{CE} = 5.0 Vdc	2N3467, L		40		
	2N3468, L		25		
Collector-Emitter Saturation Voltage					
I_C = 150 mAdc, I_B = 15 mAdc		$V_{CE(sat)}$		0.35	Vdc
I_C = 500 mAdc, I_B = 50 mAdc				0.6	
I_C = 1.0 Adc, I_B = 100 mAdc				1.2	
Base-Emitter Saturation Voltage					
I_C = 150 mAdc, I_B = 15 mAdc		$V_{BE(sat)}$	0.8	1.0	Vdc
I_C = 500 mAdc, I_B = 50 mAdc				1.2	
I_C = 1.0 Adc, I_B = 100 mAdc				1.6	
DYNAMIC CHARACTERISTICS					
Output Capacitance					
V_{CB} = 10 Vdc, I_E = 0, 100 kHz ≤ f ≤ 1.0 MHz		C_{obo}		25	pF
Extrapolated Unity Gain Frequency					
I_C = 50 mAdc, V_{CE} = 10 Vdc, f = 100NHz		f_t			MHz
	2N3467, L		175	500	
	2N3468, L		150	500	
Input Capacitance					
V_{EB} = 0.5 Vdc, I_C = 0, 100 kHz ≤ f ≤ 1.0 MHz		C_{ibo}		100	pF
SWITCHING CHARACTERISTICS					
Delay Time	I_C = 500 mAdc, I_{B1} = 50 mAdc, V_{EB} = 2	^td		10	ns
Rise Time	I_C = 500 mAdc, I_{B1} = 50 mAdc, V_{EB} = 2	^tr		30	ns
Storage Time	I_C = 500 mAdc, I_{B1} = I_{B2} = 50 mAdc	^ts		60	ns
Fall Time	I_C = 100 mAdc, I_{B1} = I_{B2} = 50 mAdc	^tf		30	ns