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2N6922,A 2N6923,A
2N6926,A 2N6927,A

These NPN silicon transistors offer a combination of speed and ruggedness for use in high speed switching systems. This series provides surface stabilization for high voltage operation and enhances long term reliability.

- * Off-line Power Supplies
- * Inverters/Converters
- * TO-204AA - 2N6922 (A), 23 (A)
- * Switching Amplifiers
- * Switching Regulators
- * TO-247 - 2N6926 (A), 27 (A)

*MAXIMUM RATINGS (T _c = 25°C unless otherwise noted.)								
SYMBOL	DESCRIPTION	2N6922/A	2N6923/A	2N6926/A	2N6927/A	UNIT		
V _{CEV}	Collector-Emitter Voltage, Blocking	550/850	550/850	550/850	550/850	Volts		
V _{CE(sus)}	Collector-Emitter Voltage, Inductive Switching	450	500	450	500	Volts		
V _{CE(sus)}	Collector-Emitter Voltage, Sustaining	400	450	400	450	Volts		
V _{EB0}	Emitter Base Voltage	8.0		8.0		Volts		
I _C	Collector Current—Continuous/Peak	20/30		20/30		Amps		
I _E	Emitter Current—Continuous/Peak	30/40		30/40		Amps		
I _B	Base Current—Continuous/Peak	10/15		10/15		Amps		
P _O	Total Power Dissipation @ T _c = 25°C	220		125		Watts		
T _{J(oper)} T _{J(stg)}	Operating and Storage Junction Temperature Range	- 65 to +200		-55 to +150		°C		
*ELECTRICAL CHARACTERISTICS (Applies to all types unless otherwise noted.)								
			T _c = 25°C		T _c = 100°C			
SYMBOL	CONDITIONS	PART NO/NOTES	MIN.	MAX.	MIN.	MAX.	UNIT	
OFF-STATE								
V _{CE(sus)}	I _C = 50mA	2N6922, 6 (A) 2N6923, 7 (A)	400 450				Volts	
I _{CEV}	V _{CE} = Rated V _{CEV} , V _{EB} = 1.5V			1.0			mA	
I _{CEV}	V _{CE} = 0.8 Rated V _{CEV} , V _{EB} = 1.5V			10		100	μA	
I _{EB0}	V _{EB} = 8.0V			1.0			mA	
ON-STATE								
h _{FE}	I _C = 15A, V _{CE} = 2.0V	Pulsed: Notes 1 & 2	8.0					
V _{CE(sat)}	I _C = 15A, I _B = 3.0A			1.0		1.5	Volts	
V _{CE(sat)}	I _C = 20A, I _B = 5.0A			2.0			Volts	
V _{CE(sat)}	I _C = 30A, I _B = 10A	Pulsed: Notes 1 & 3		5.0			Volts	
V _{BE(sat)}	I _C = 15A, I _B = 3.0A	Pulsed: Notes 1 & 2		1.5			Volts	
DYNAMIC								
f _T	V _{CE} = 10V, I _C = 1.0A, f = 10MHz	Pulsed: Note 2	15	50			MHz	
C _{obs}	V _{CB} = 10V, f = 1.0MHz		200	500			pF	
t _d	I _C = 15A I _{B1} = 3.0A	Resistive Load V _{CC} = V _{CE(sus)}		20			ns	
t _r				50			ns	
t _{sd} (t _f)		Current Source Load	Measured to 10V		1.0		3.0	μs
t _{sv}		Inductive Load I _C = 15A I _{B1} = 3.0A I _{B2} = 6.0A t _p = 30μsec L = 100μH V _{CLAMP} = V _{CE(sus)}			1.0		1.5	μs
t _{rv}					30		40	ns
t _{th}					30		40	ns
t _c				50		70	ns	
THERMAL								
R _{θJC}	V _{CE} = 10V, I _C = 10A	2N6922, 3 (A)		0.8			°C/W	
R _{θJC}	V _{CE} = 10V, I _C = 5.0A	2N6926, 7 (A)		1.0			°C/W	
Notes: 1) Measured using Kelvin connections. 2) Pulse measurement conditions: Length = 300μs. Duty cycle < 2%. 3) Pulse measurement conditions: Length = 10μs. Duty cycle < 2%.								
				*JEDEC registered data.				

Case TO-3 and TO-204AA

