

2N2432A

ELECTRICAL DATA (ABSOLUTE MAXIMUM RATINGS)

PARAMETER	SYMBOL	2N2432/4138	2N2432A	UNITS
Collector - Emitter Breakdown Voltage	BV _{CEO}	30	45	V
Collector - Base Breakdown Voltage	BV _{CBO}	30	45	V
Emitter - Base Breakdown Voltage	BV _{EB0}	15	18	V
Emitter - Collector Breakdown Voltage	BV _{ECO}	15	18	V
Collector Current	I _C	100		mA
Power Dissipation (Free Air @ 25°C)	P _D	*300		mW
Power Dissipation (Case @ 25°C)	P _C	**600		mW
Storage Temperature Range	T _{stg}	-65°C to 200°C		
Lead Temp. (1/16" From Case)	T _L	300°C for 10 sec.		

ELECTRICAL CHARACTERISTICS: T_A = 25°C (UNLESS OTHERWISE NOTED)

PARAMETER	SYMBOL	TEST CONDITIONS	2N2432A		2N2432-2N4138		UNITS
			MIN.	MAX.	MIN.	MAX.	
Collector - Emitter Breakdown Voltage	BV _{CEO}	I _C = 10mA, I _B = 0	45		30		V
Collector - Base Breakdown Voltage	BV _{CBO}	I _C = 100μA, I _E = 0	45		30		V
Emitter - Collector Breakdown Voltage	BV _{ECO}	I _E = 100μA, I _B = 0	18		15		V
Collector to Base Leakage	I _{CBO}	V _{CB} = 25V, I _E = 0		10		10	nA
Collector to Emitter Leakage	I _{CEs}	V _{CE} = 25V, V _{BE} = 0		10		10	nA
Collector to Emitter Leakage	I _{CEs}	V _{CE} = 25V, V _{BE} = 0, T _A = 125°C		250		250	nA
Emitter to Base Leakage	I _{EB0}	V _{EB} = 15V, I _C = 0		2		2	nA
Emitter to Collector Leakage	I _{ECS}	V _{EC} = 15V, V _{BC} = 0		2		2	nA
Emitter to Collector Leakage	I _{ECS}	V _{EC} = 15V, V _{CB} = 0, T _A = 125°C		200		200	
D.C. Common Emitter Forward Current Transfer Ratio	h _{FE}	V _{CE} = 5V, I _C = 10μA	30		30		
	h _{FE}	V _{CE} = 5V, I _C = 1mA	50		50		
D.C. Common Collector Forward Current Transfer Ratio	h _{FC}	V _{EC} = 5V, I _E = 200μA	3		2		
Collector - Emitter Saturation Voltage	V _{CE(sat)}	I _B = 0.5mA, I _C = 10mA		0.15		0.15	V
Offset Voltage	V ₀	I _B = 200μA, I _E = 0		0.4		0.5	mV
Offset Voltage	V ₀	I _B = 1mA, I _E = 0		0.7		1.0	mV
Inverted Dynamic Saturation Resistance	r _{EC(sat)}	I _B = 1mA, I _E = 100μA, f = 1kHz		15		20	Ohms
Small - Signal Common Emitter Forward Current Transfer Ratio	h _{re}	V _{CE} = 5V, I _C = 1mA, f = 20MHz	1		1		
Common - Base Open Circuit Output Capacitance	C _{ob0}	V _{CB} = 0, I _E = 0, f = 140kHz		12		12	pf
Collector - Base Capacitance	C _{cb}	V _{CB} = 0, I _E = 0, f = 1MHz		12		12	pf
Common - Base Open Circuit Input Capacitance	C _{ib0}	V _{EB} = 0, I _C = 0, f = 140kHz		12		12	pf
Emitter - Base Capacitance	C _{eb}	V _{EB} = 0, I _C = 0, f = 1MHz		12		12	pf