



Micro Commercial Components



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MJD112

Silicon NPN epitaxial planer Transistors

Features

- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- High DC Current Gain
- Built-in a damper diode at E-C
- Maximum Thermal Resistance: 125°C/W Junction to Ambient

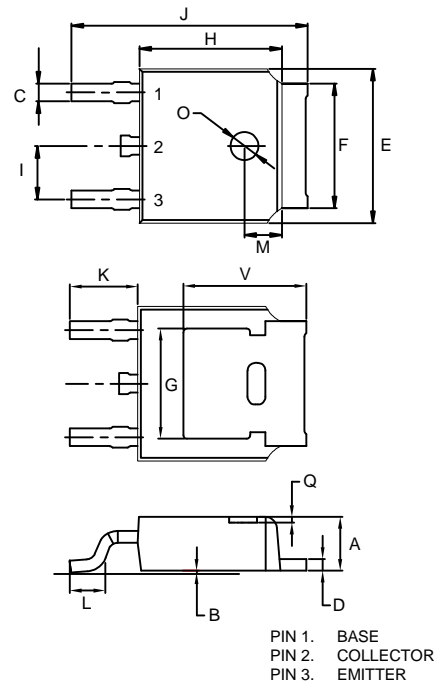
Maximum Ratings @ 25°C Unless Otherwise Specified

Symbol	Rating	Rating	Unit
V _{CEO}	Collector-Emitter Voltage	100	V
V _{CBO}	Collector-Base Voltage	100	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current-Continuous	2	A
P _C	Collector Dissipation	1.0	W
T _J	Operating Junction Temperature	150	°C
T _{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage (I _C =30mA, I _B =0)	100	---	---	Vdc
V _{(BR)CBO}	Collector-Base Breakdown Voltage (I _C =1mA, I _E =0)	100	---	---	Vdc
V _{(BR)EBO}	Collector-Emitter Breakdown Voltage (I _E =5mA, I _C =0)	5	---	---	Vdc
I _{CBO}	Collector Cutoff Current (V _{CB} =100Vdc, I _E =0)	---	---	20	nAdc
I _{CEO}	Collector emitter cutoff Current (V _{CE} =50Vdc, I _E =0)	---	---	20	nAdc
I _{EBO}	Emitter Cutoff Current (V _{EB} =5Vdc, I _C =0)	---	---	2	mAdc
h _{FE}	DC Current Gain (I _C =500mA, V _{CE} =3Vdc) (I _C =2Adc, V _{CE} =3Vdc) (I _C =4Adc, V _{CE} =3Vdc)	500 1000 200	---	---	12000 ---
V _{CE(sat)}	Collector-Emitter Saturation Voltage (I _C =2Adc, I _B =8mA) (I _C =4Adc, I _B =40mA)	---	---	2 3	Vdc
f _T	Transition frequency (V _{CE} =10Vdc, f=1MHz, I _C =0.75A)	25	---	---	MHZ
V _{BE}	Base-Emitter Saturation Voltage (I _C =2Adc, V _{CE} =3Vdc)	---	---	2.8	Vdc
C _{ob}	Output Capacitance (V _{CB} =10Vdc, f=0.1MHz, I _E =0)	---	---	100	pF

DPAK

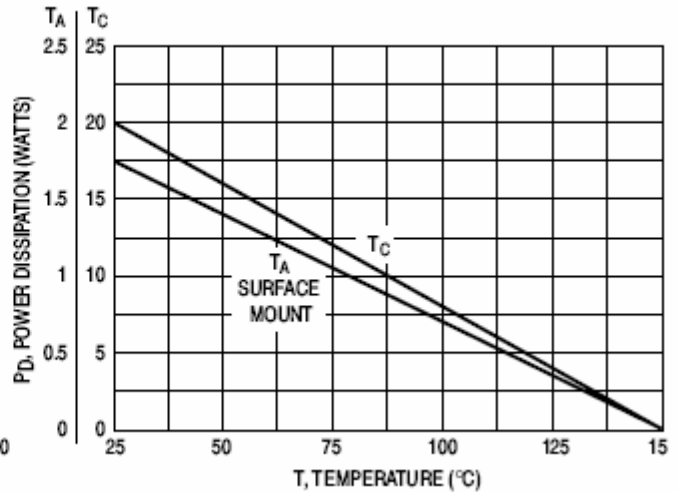
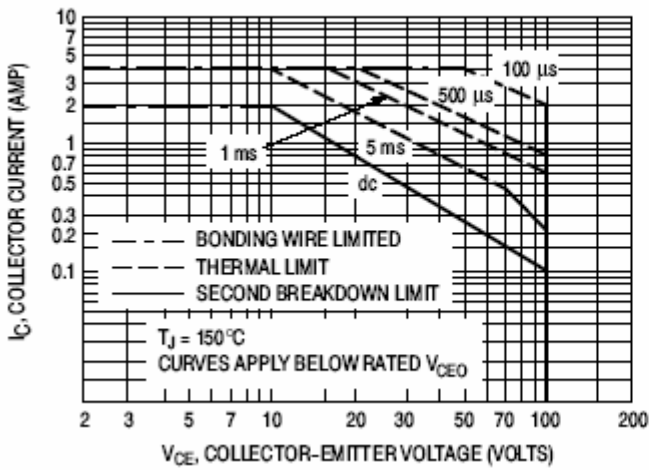
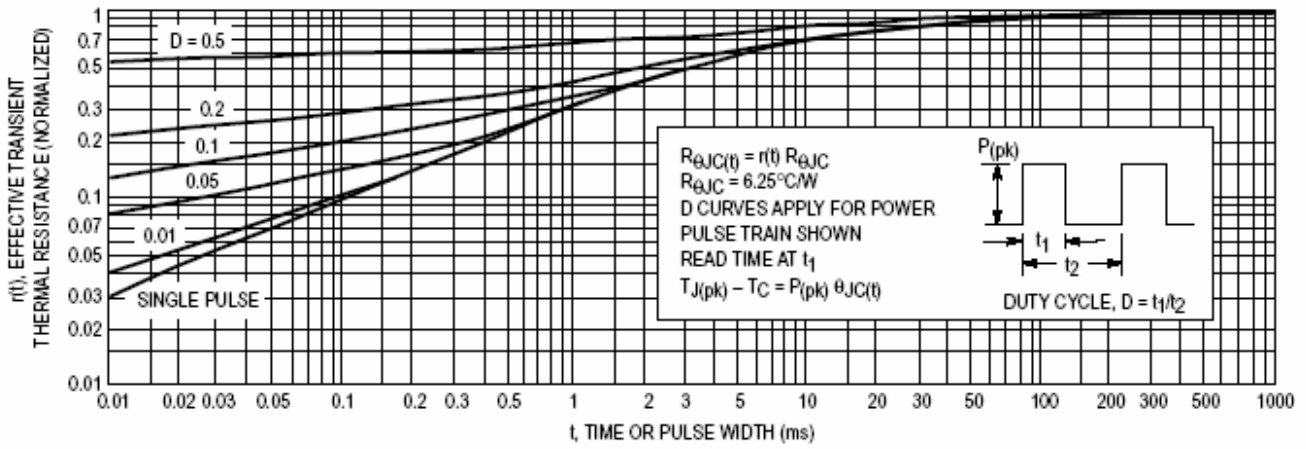


DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.087	0.094	2.20	2.40	
B	0.000	0.005	0.00	0.13	
C	0.026	0.034	0.66	0.86	
D	0.018	0.023	0.46	0.58	
E	0.256	0.264	6.50	6.70	
F	0.201	0.215	5.10	5.46	
G	0.190		4.83		
H	0.236	0.244	6.00	6.20	
I	0.086	0.094	2.18	2.39	
J	0.386	0.409	9.80	10.40	
K	0.114		2.90		
L	0.055	0.067	1.40	1.70	
M	0.063		1.60		
O	0.043	0.051	1.10	1.30	
Q	0.000	0.012	0.00	0.30	
V	0.211		5.35		

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Typical Characteristics





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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

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