

Micro Commercial Components



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Features

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant("P" Suffix designates
 Designates
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 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

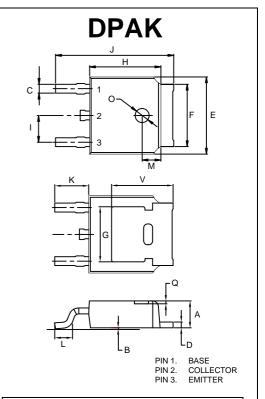
Symbol	Rating	Rating	Unit
V _{CEO}	Collector-Emitter Voltage	100	V
V _{CBO}	Collector-Base Voltage	100	V
V _{EBO}	Emitter-Base Voltage	5	V
lc	Collector Current-Continuous	2	A
Pc	Collector Dissipation	1.0	W
TJ	Operating Junction Temperature	150	°C
T _{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Тур	Max	Units
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage (I _C =30mAdc, I _B =0)	100			Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage (I _c =1mAdc, I _E =0)	100			Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage (I _E =5mAdc, I _C =0)	5			Vdc
I _{CBO}	Collector Cutoff Current (V _{CB} =100Vdc, I _E =0)			20	uAdc
I _{CEO}	Collector emitter cutoff Current (V _{CE} =50Vdc, I _E =0)			20	uAdc
I _{EBO}	Emitter Cutoff Current (V _{EB} =5Vdc, I _C =0)			2	mAdc
h _{FE}	DC Current Gain (I_c =500mAdc, 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 ($I_c=2Adc$, $I_B=8mAdc$) ($I_c=4Adc$, $I_B=40mAdc$)			2 3	Vdc Vdc
f⊤	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

MJD112

Silicon NPN epitaxial planer Transistors



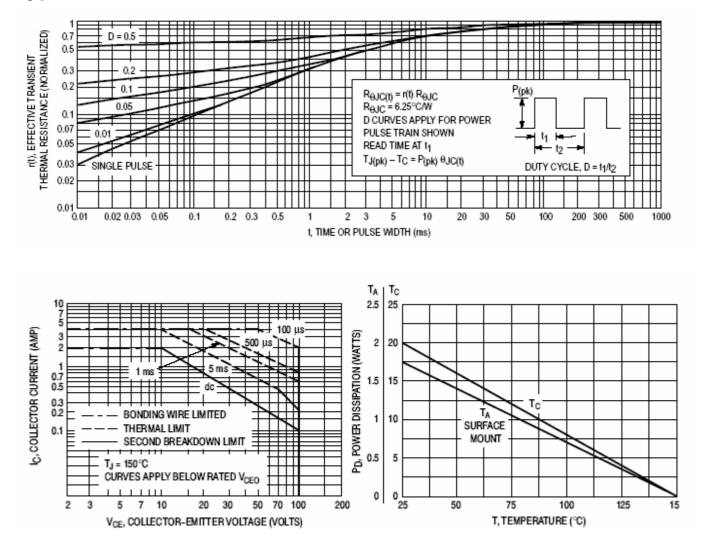
	INC	HES	N	1M	
DIM	MIN	MAX	MIN	MAX	NOTE
А	0.087	0.094	2.20	2.40	
В	0.000	0.005	0.00	0.13	
С	0.026	0.034	0.66	0.86	
D	0.018	0.023	0.46	0.58	
E	0.256	0.264	6.50	6.70	
F	0.201	0.215	5.10	5.46	
G	0.19	90	4.	83	
Н	0.236	0.244	6.00	6.20	
Ι	0.086	0.094	2.18	2.39	
J	0.386	0.409	9.80	10.40	
К	0.11	14	2.	90	
L	0.055	0.067	1.40	1.70	
М	0.06	63	1.	60	
0	0.043	0.051	1.10	1.30	
Q	0.000	0.012	0.00	0.30	
V	0.2	11	5.	35	

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MJD112

Typical Characteristics



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Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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