

MJD340 MJD350

COMPLEMENTARY SILICON POWER TRANSISTORS

- SGS-THOMSON PREFERRED SALESTYPES
- COMPLEMENTARY PNP NPN DEVICES
- MEDIUM VOLTAGE CAPABILITY
- SURFACE-MOUNTING TO-252 (DPAK) POWER PACKAGE IN TAPE & REEL (SUFFIX "T4")
- ELECTRICAL SIMILAR TO MJE340 AND MJE350

APPLICATIONS

- SOLENOID/RELAY DRIVERS
- GENERAL PURPOSE SWITCHING AND AMPLIFIER

DESCRIPTION

The MJD340 and MJD350 form complementary NPN - PNP pairs.

They are manufactured using Medium Voltage Epitaxial Planar technology, resulting in a rugged high performance cost-effective transistor.





ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter		Value	Unit
		NPN	MJD340	
		PNP	MJD350	
V _{CBO}	Collector-Base Voltage (IE = 0)		300	V
Vceo	Collector-Emitter Voltage $(I_B = 0)$		300	V
V _{EBO}	Emitter-Base Voltage (IC = 0)		3	V
lc	Collector Current		0.5	Α
I _{CM}	Collector Peak Current (tp = 25 °C)		0.75	А
Ptot	Total Power Dissipation at $T_{case} \le 25 \ ^{o}C$		15	W
T _{stg}	Storage Temperature		-65 to 150	°C
Tj	Max Operating Junction Temperature		150	°C

For PNP types voltage and current values are negative.

THERMAL DATA

R _{thj-case}	Thermal Resistance Junction-case	Max	8.33	°C/W
$R_{thj-amb}$	Thermal Resistance Junction-ambient	Max	100	°C/W

ELECTRICAL CHARACTERISTICS (T_{case} = 25 °C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Тур.	Max.	Unit
I _{СВО}	Collector Cut-off Current (v _{bE} = 0)	V _{CB} = 300 V			0.1	mA
I _{EBO}	Emitter Cut-off Current $(I_C = 0)$	V _{EB} = 3 V			0.1	mA
$V_{CEO(sus)}$	Collector-Emitter Sustaining Voltage	$I_{\rm C} = 1 \mathrm{mA}$	300			V
h _{FE} *	DC Current Gain	I _C = 50 mA V _{CE} = 10 V	30		240	

 \ast Pulsed: Pulse duration = 300 $\mu s,$ duty cycle \leq 2 %

For PNP type voltage and current values are negative.

Safe Operating Area



Derating Curve





DC Current Gain (NPN type)



Collector Emitter Saturation Voltage (NPN type)



DC Current Gain (PNP type)



Collector Emitter Saturation Voltage (PNP type)





	1						
DIM	mm			inch			
2	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	
А	2.2		2.4	0.086		0.094	
A1	0.9		1.1	0.035		0.043	
A2	0.03		0.23	0.001		0.009	
В	0.64		0.9	0.025		0.035	
B2	5.2		5.4	0.204		0.212	
С	0.45		0.6	0.017		0.023	
C2	0.48		0.6	0.019		0.023	
D	6		6.2	0.236		0.244	
Е	6.4		6.6	0.252		0.260	
G	4.4		4.6	0.173		0.181	
Н	9.35		10.1	0.368		0.397	
L2		0.8			0.031		
L4	0.6		1	0.023		0.039	

TO-252 (DPAK) MECHANICAL DATA





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