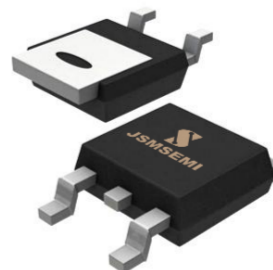
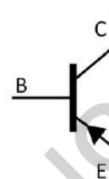


DESCRIPTION

- Collector-Emitter Breakdown Voltage
 $-V_{(BR)CEO} = -100V(\text{Min})$
- Collector-Emitter Saturation Voltage
 $-V_{CE(sat)} = -1.5V(\text{Max}) @ I_C = -6A$
- Complement to Type MJD41C


APPLICATIONS

- Designed for low power audio amplifier and low-current, high-speed switching applications


ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-6	A
I_{CM}	Collector Current-Peak	-10	A
I_B	Base Current	-2	A
P_C	Collector Power Dissipation $T_C=25^\circ\text{C}$	20	W
	Collector Power Dissipation $T_a=25^\circ\text{C}$	1.75	
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	6.25	$^\circ\text{C/W}$
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	71.4	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS (T_C=25°C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = -30mA; I _B = 0	-100	--	V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -6A; I _B = -0.6A	--	-1.5	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -6A; V _{CE} = -4V	--	-2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -100V; I _E = 0	--	-10	μA
I _{CEO}	Collector Cutoff Current	V _{CE} = -60V; I _B = 0	--	-50	μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0	--	-0.5	mA
h _{FE-1}	DC Current Gain	I _C = -0.3A; V _{CE} = -4V	30	--	
h _{FE-2}	DC Current Gain	I _C = -3A; V _{CE} = -4V	15	75	
f _T	Current-Gain—Bandwidth Product	I _C = -0.5A; V _{CE} = -10V	3	--	MHz

PRODUCT DISCLAIMER

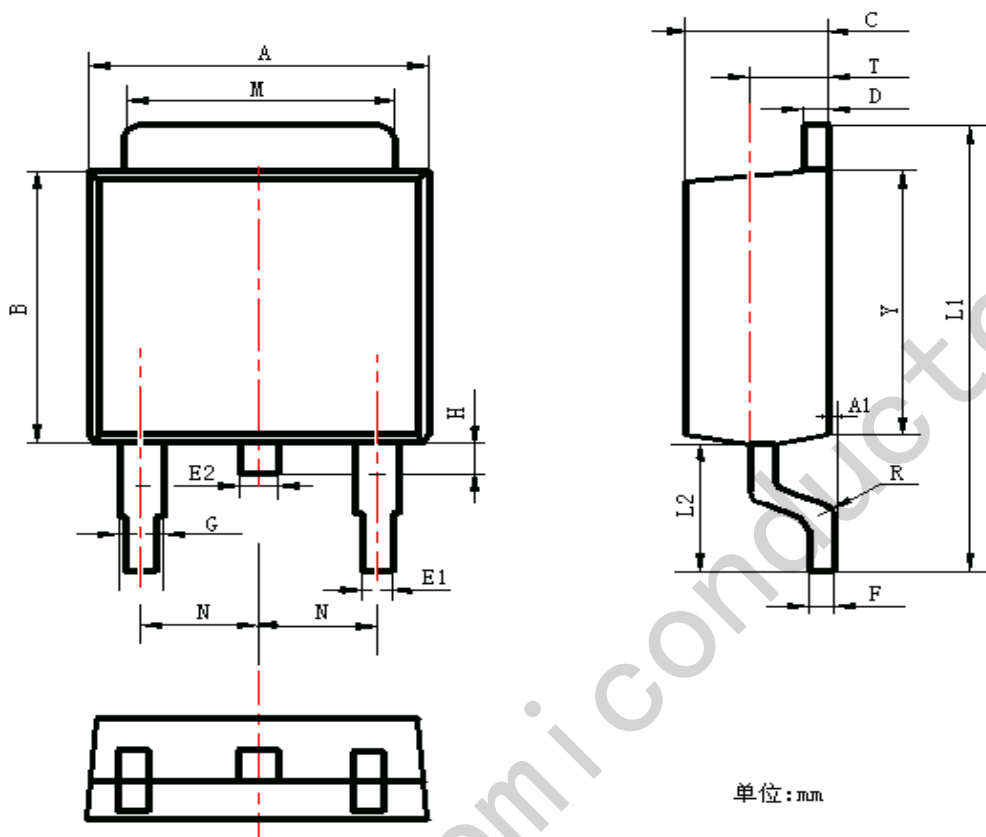
JSMSEMI reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

JSMSEMI products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

JSMSEMI makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does JSMSEMI assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.

It is strictly prohibited to reprint or copy part or all of this datasheet without permission from JSMSEMI .

TO-252 Package Information



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	6.30	6.90	0.248	0.272
A1	0.00	0.16	0.000	0.006
B	5.70	6.30	0.224	0.248
C	2.10	2.50	0.083	0.098
D	0.30	0.70	0.012	0.028
E1	0.60	0.90	0.024	0.035
E2	0.70	1.00	0.028	0.039
F	0.30	0.60	0.012	0.024
G	0.70	1.20	0.028	0.047
L1	9.60	10.50	0.378	0.413
L2	2.70	3.10	0.106	0.122
H	0.40	1.00	0.016	0.039
M	5.10	5.50	0.201	0.217
N	2.09	2.49	0.082	0.098
R	0.30		0.012	
T	1.40	1.60	0.055	0.063
Y	5.10	6.30	0.201	0.248