Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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2N6544
2N6545

NPN SILICON
POWER TRANSISTOR

TO-3 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N6544, 2N6545 types are Silicon NPN Triple Diffused Mesa Transistors designed for high voltage, high current, high speed switching applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_C=25°C)	**SYMBOL**	**2N6544**	**2N6545**	**UNITS**
Collector-Emitter Voltage	V_{CEV}	650	850	V
Collector-Emitter Voltage	V_{CEX}	350	450	V
Collector-Emitter Voltage	V_{CEO}	300	400	V
Emitter-Base Voltage	V_{EBO}	9.0		V
Continuous Collector Current	I_C	8.0		A
Peak Collector Current	I_{CM}	16		A
Continuous Emitter Current	I_E	16		A
Peak Emitter Current	I_{EM}	32		A
Continuous Base Current	I_B	8.0		A
Peak Base Current	I_{BM}	16		A
Power Dissipation	P_D	125		W
Power Dissipation, T_C=100°C	P_D	71.5		W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200		°C
Thermal Resistance	Θ_{JC}	1.4		°C/W

ELECTRICAL CHARACTERISTICS: (T_C=25°C unless otherwise noted)

		2N6544		**2N6545**		
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**	**UNITS**
I_{CEV}	V_{CE}=Rated V_{CEV}, V_{BE}=1.5V	-	0.5	-	0.5	mA
I_{CEV}	V_{CE}=Rated V_{CEV}, V_{BE}=1.5V, T_C=100°C	-	2.5	-	2.5	mA
I_{CER}	V_{CE}=Rated V_{CEV}, R_{BE}=50Ω, T_C=100°C	-	3.0	-	3.0	mA
I_{EBO}	V_{EB}=9.0V	-	1.0	-	1.0	mA
BV_{CEX}	V_{CL}=Rated V_{CEX}, I_C=4.5A, T_C=100°C	350	-	450	-	V
BV_{CEX}	V_{CL}=Rated V_{CEO}-100V, I_C=8.0A, T_C=100°C	200	-	300	-	V
BV_{CEO}	I_C=100mA	300	-	400	-	V
$V_{CE(SAT)}$	I_C=5.0A, I_B=1.0A	-	1.5	-	1.5	V
$V_{CE(SAT)}$	I_C=8.0A, I_B=2.0A	-	5.0	-	5.0	V
$V_{CE(SAT)}$	I_C=5.0A, I_B=1.0A, T_C=100°C	-	2.5	-	2.5	V
$V_{BE(SAT)}$	I_C=5.0A, I_B=1.0A	-	1.6	-	1.6	V
$V_{BE(SAT)}$	I_C=5.0A, I_B=1.0A, T_C=100°C	-	1.6	-	1.6	V
h_{FE}	V_{CE}=3.0V, I_C=2.5A	12	60	12	60	
h_{FE}	V_{CE}=3.0V, I_C=5.0A	7.0	35	7.0	35	

R1 (7-February 2011)

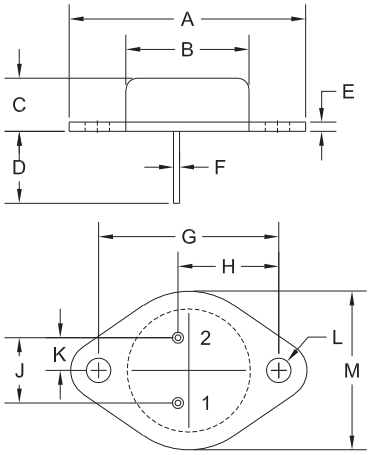
2N6544
2N6545

NPN SILICON
POWER TRANSISTOR

ELECTRICAL CHARACTERISTICS - Continued: (T_C=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
f_t	V_{CE}=10V, I_C=300mA, f=1.0MHz	6.0		28	MHz
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz	75		300	pF
$I_{s/b}$	V_{CE}=100V, t=1.0s	0.2			A
Resistive Load					
t_d	V_{CC}=250V, I_C=5.0A, I_{B1}=I_{B2}=1.0A, t_p=100μs, Duty Cycle≤2.0%			0.05	μs
t_r				1.0	μs
t_s				4.0	μs
t_f				1.0	μs
Inductive Load (Clamped)					
t_s	V_{CL}=Rated V_{CEX}, I_C=5.0A, I_{B1}=1.0A, V_{BE}=5.0V, T_C=100°C			4.0	μs
t_f				0.9	μs
t_s	V_{CL}=Rated V_{CEX}, I_C=5.0A, I_{B1}=1.0A, V_{BE}=5.0V, T_C=25°C		1.2		μs
t_f			0.18		μs

TO-3 CASE - MECHANICAL OUTLINE



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	1.516	1.573	38.50	39.96
B (DIA)	0.748	0.875	19.00	22.23
C	0.250	0.450	6.35	11.43
D	0.433	0.516	11.00	13.10
E	0.054	0.065	1.38	1.65
F	0.035	0.045	0.90	1.15
G	1.177	1.197	29.90	30.40
H	0.650	0.681	16.50	17.30
J	0.420	0.440	10.67	11.18
K	0.205	0.225	5.21	5.72
L (DIA)	0.151	0.172	3.84	4.36
M	0.984	1.050	25.00	26.67

TO-3 (REV: R2)

R2

LEAD CODE:
1) Base
2) Emitter
Case) Collector

MARKING:
FULL PART NUMBER

R1 (7-February 2011)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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