

CENTRAL SEMICONDUCTOR

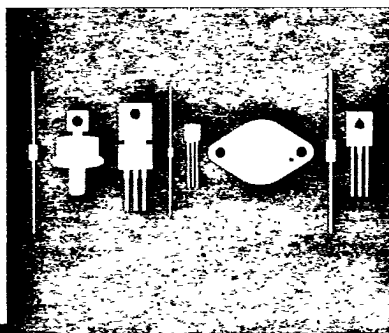
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CENTRAL SEMICONDUCTOR CORP.

查询"D41E5"供应商

Semiconductor Corp.

Central  
Semiconductor Corp.**Central<sup>TM</sup>  
Semiconductor Corp.**145 Adams Avenue  
Hauppauge, New York 11788

D41E1

D41E5

D41E7

PNP SILICON POWER TRANSISTOR

JEDEC TO-202 CASE (EBC)

**DESCRIPTION**

The CENTRAL SEMICONDUCTOR D41E series types are silicon PNP transistors manufactured by the epitaxial planar process designed for general purpose amplifier and switching applications. Device is available with a sheared tab by adding a "N" suffix to the part number.

**MAXIMUM RATINGS** ( $T_C=25^\circ\text{C}$  unless otherwise noted)

	SYMBOL	D41E1	D41E5	D41E7	UNIT
Collector - Emitter Voltage	$V_{CES}$	40	70	90	V
Collector - Emitter Voltage	$V_{CEO}$	30	60	80	V
Emitter - Base Voltage	$V_{EBO}$	5.0	5.0	5.0	V
Collector Current	$I_C$	2.0	2.0	2.0	A
Collector Current (Peak)	$I_{CM}$	3.0	3.0	3.0	A
Base Current	$I_B$	500	500	500	mA
Power Dissipation ( $T_A=25^\circ\text{C}$ )	$P_D$	2.0	2.0	2.0	W
Power Dissipation	$P_D$	10	10	10	W
Operating and Storage Junction Temperature	$T_J, T_{STG}$	-65 TO +150			$^\circ\text{C}$
Thermal Resistance	$\theta_{JC}$	12.5			$^\circ\text{C/W}$

**ELECTRICAL CHARACTERISTICS** ( $T_C=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	D41E1		D41E5		D41E7		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
$I_{CES}$	$V_{CE}=\text{RATED } V_{CES}$		0.1		0.1		0.1	$\mu\text{A}$
$I_{EBO}$	$V_{EB}=5.0\text{V}$		0.1		0.1		0.1	$\mu\text{A}$
$BV_{CEO}$	$I_C=10\text{mA}$	30		60		80		V
$V_{CE}(\text{SAT})$	$I_C=1.0\text{A}, I_B=0.1\text{A}$		1.0		1.0		1.0	V
$V_{BE}(\text{SAT})$	$I_C=1.0\text{A}, I_B=0.1\text{A}$		1.3		1.3		1.3	V
$h_{FE}$	$V_{CE}=2.0\text{V}, I_C=100\text{mA}$	50		50		50		
$h_{FE}$	$V_{CE}=2.0\text{V}, I_C=1.0\text{A}$	10		10		10		
$f_T$	$V_{CE}=10\text{V}, I_C=20\text{mA}$	160 TYP		160 TYP		160 TYP		MHz
$C_{ob}$	$V_{CB}=10\text{V}, f=1.0\text{MHz}$	18 TYP		18 TYP		18 TYP		pF
$t_{ON}$	$I_C=1.0\text{A}, I_{B1}=0.1\text{A}$	160 TYP		160 TYP		160 TYP		ns
$t_{OFF}$	$I_C=1.0\text{A}, I_{B1}=I_{B2}=0.1\text{A}$	350 TYP		350 TYP		350 TYP		ns