



Micro Commercial Components

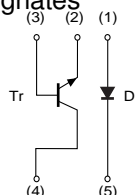


Micro Commercial Components  
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# UML2N

## Features

- Halogen free available upon request by adding suffix "-HF"
- 2SC5585 and RB521S-30 are housed independently
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1



MARKING:L2

### TR MAXIMUM RATINGS ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

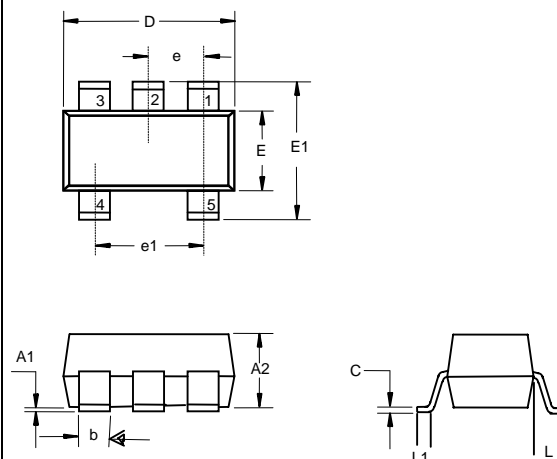
Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{CEO}$	Collector-Emitter Voltage	50	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current -Continuous	150	mA
$P_C$	Collector Power Dissipation	150	mW
$T_J$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature	-55 to 150	$^{\circ}\text{C}$

### DIO Electrical Characteristics, Single Diode @ $T_A=25^{\circ}\text{C}$

Parameter	Symbol	Typ	Unit
DC reverse voltage	$V_R$	80	V
Peak Reverse Voltage	$V_{RM}$	80	V
Forward Continuous Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_O$	100	mA
Surge current	$I_{SURGE}$	4	A
Junction temperature	$T_J$	150	$^{\circ}\text{C}$
Storage temperature	$T_{STG}$	-55~+150	$^{\circ}\text{C}$

## ISOLATED TRANSISTOR AND DIODES

## SOT-353



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A1	---	.004	---	0.100	
A2	.035	.039	0.900	1.000	
b	.006	.014	0.150	0.350	
c	.003	.006	0.080	0.150	
D	0.79	.087	2.000	2.200	
E	.045	.053	1.150	1.350	
E1	.085	.096	2.150	2.450	
e	.026TYP		0.650TYP		
e1	.047	.055	1.200	1.400	
L	.021REF		0.525REF		
L1	.010	.018	0.260	0.460	

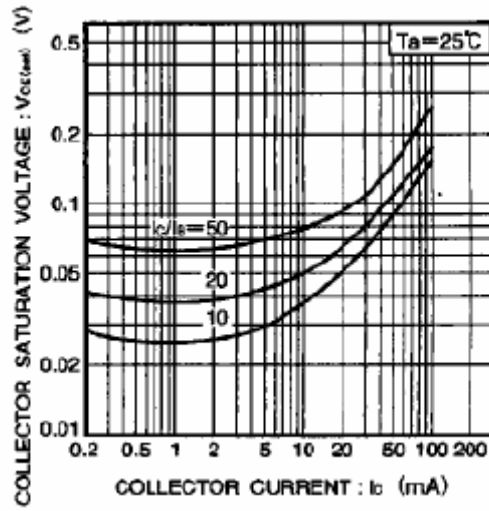
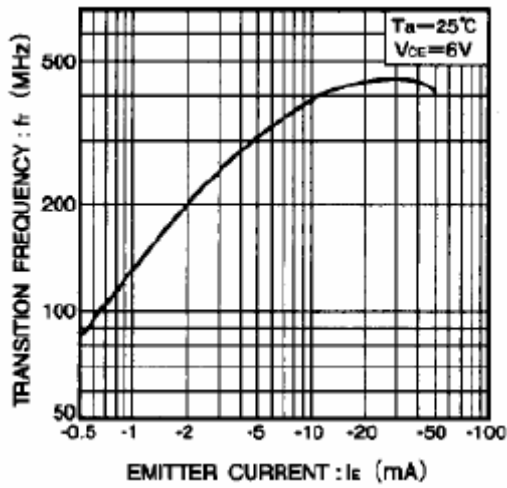
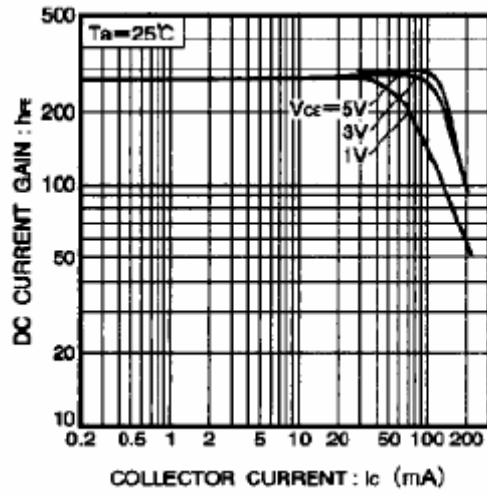
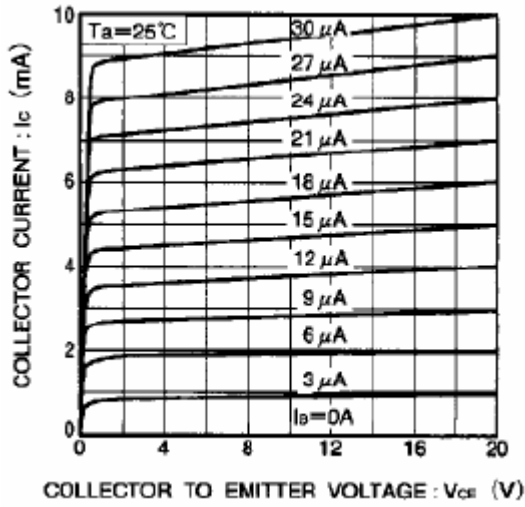
## TR ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu A, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu A, I_C=0$	6			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=60V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=6V, I_C=1mA$	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=50mA, I_B=5mA$			0.4	V
Transition frequency	$f_T$	$V_{CE}=12V, I_C=2mA, f=100MHz$		180		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=12V, I_E=0, f=1MHz$			3.5	pF

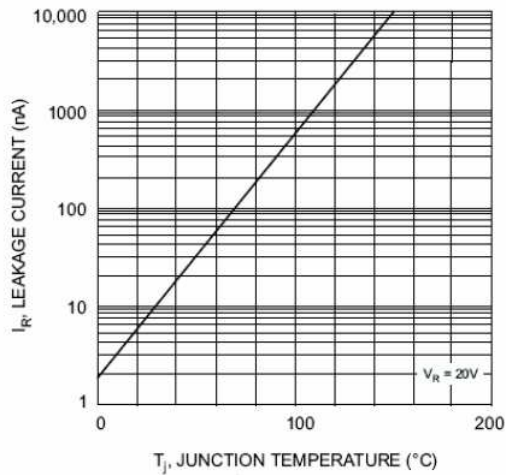
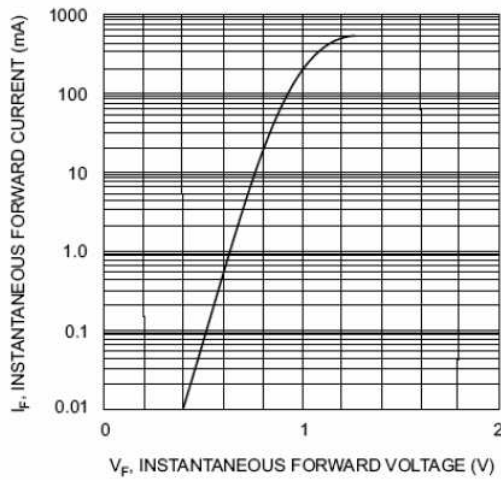
DIO Electrical Ratings @T<sub>A</sub>=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$			1.2	V	$I_F=100mA$
Reverse current	$I_R$			0.1	$\mu A$	$V_R=70V$
Capacitance between terminals	$C_T$			3.5	pF	$V_R=6V, f=1MHz$
Reverse Recovery Time	$t_{rr}$			4	ns	$V_R=6V,$ $I_F=5mA, R_L=50\Omega$

# Typical Characteristics



## DIODES





Micro Commercial Components

### Ordering Information :

Device	Packing
Part Number-TP	Tape & Reel; 3 Kpcs/Reel

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

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