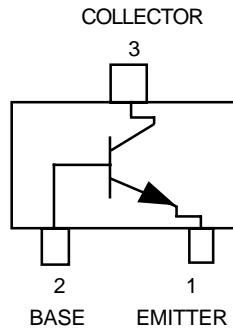


NPN General Purpose Amplifier Transistors Surface Mount



MSD601-RT1
MSD601-ST1



CASE 318D-03, STYLE1
SC-59

MAXIMUM RATINGS (T_A = 25°C)

Rating	Symbol	Value	Unit
Collector-Base Voltage	V _{(BR)CBO}	60	Vdc
Collector-Emitter Voltage	V _{(BR)CEO}	50	Vdc
Emitter-Base Voltage	V _{(BR)EBO}	7.0	Vdc
Collector Current-Continuous	I _C	100	mAdc
Collector Current-Peak	I _{C(P)}	200	mAdc

THERMAL CHARACTERISTICS

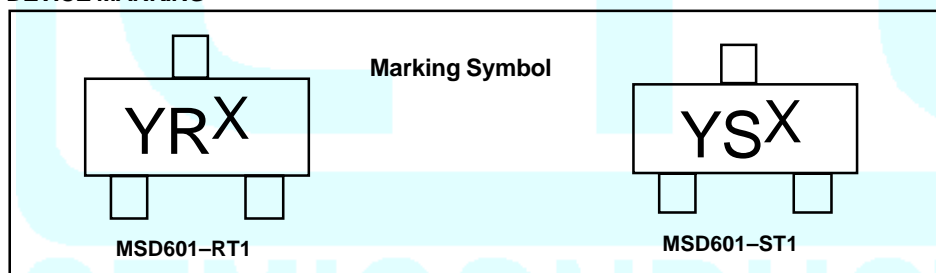
Characteristic	Symbol	Max	Unit
Power Dissipation	P _D	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C)

Characteristic	Symbol	Min	Max	Unit
Collector-Emitter Breakdown Voltage (I _C = 2.0 mAdc, I _B = 0)	V _{(BR)CEO}	50	—	Vdc
Collector-Base Breakdown Voltage (I _C = 10 μAdc, I _E = 0)	V _{(BR)CBO}	60	—	Vdc
Emitter-Base Breakdown Voltage (I _E = 10 μAdc, I _C = 0)	V _{(BR)EBO}	7.0	—	Vdc
Collector-Base Cutoff Current (V _{CB} = 45 Vdc, I _E = 0)	I _{CBO}	—	0.1	μAdc
Collector-Emitter Cutoff Current (V _{CE} = 10 Vdc, I _B = 0)	I _{CEO}	—	100	nAdc
DC Current Gain ⁽¹⁾				—
(V _{CE} = 10 Vdc, I _C = 2.0 mAdc)	MSD601-RT1	h _{FE1}	210	340
	MSD601-ST1		290	460
(V _{CE} = 2.0 Vdc, I _C = 100 mAdc)		h _{FE2}	90	—
Collector-Emitter Saturation Voltage (I _C = 100 mAdc, I _B = 10 mAdc)	V _{CE(sat)}	—	0.5	Vdc

1. Pulse Test: Pulse Width ≤ 300 μs, D.C. < 2%.

DEVICE MARKING



The "X" represents a smaller alpha digit Date Code. The Date Code indicates the actual month in which the part was manufactured.