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N-P-N
Silicon Power Transistor

MAXIMUM RATINGS

Collector-to-Emitter Sustaining Voltage (R_{BE} = 500 Ω)	$V_{CER}(sus)$	300	V
Emitter-to-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	2	A
Base Current	I_B	1	A
Transistor Dissipation:			
T_C up to 25°C	P_T	35	W
T_C above 25°C	P_T	See Rating Chart	
T_C = 175°C	P_T	5	W
Temperature Range:			
Operating (Junction)	T_J(opr)	−65 to 200	°C

CHARACTERISTICS (At case temperature = 25°C)

Collector-to-Emitter Sustaining Voltage (I_C = 200 mA, R_{BE} = 500 Ω)	$V_{CER}(sus)$	300 min	V
Base-to-Emitter Voltage (V_{CE} = 10 V, I_C = 0.5 A)	V_{BE}	1.5 max	V
Collector-Cutoff Current:			
V_{CE} = 150 V, I_B = 0	I_{CEO}	5 max	mA
V_{CE} = 150 V, V_{BE} = −1.5 V, T_C = 25°C	I_{CEV}	5 max	mA
V_{CE} = 150 V, V_{BE} = −1.5 V, T_C = 150°C	I_{CEV}	10 max	mA
Emitter-Cutoff Current (V_{EB} = 6 V, I_C = 0)	I_{EBO}	5 max	mA
Static Forward-Current Transfer Ratio:			
V_{CE} = 10 V, I_C = 20 mA	h_{FE}	40 min	
V_{CE} = 10 V, I_C = 500 mA	h_{FE}	50 min	
Second-Breakdown Collector Current (V_{CE} = 150 V)	$I_{s/b}$	100 min	mA
Second-Breakdown Energy (V_{BE} = 4 V, R_{BE} = 20 Ω, L = 100 μH)	$E_{s/b}$	50 min	μJ
Thermal Resistance, Junction-to-Case	θ_{J-C}	5 max	°C/W