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2N6137

ABSOLUTE MAXIMUM RATINGS

Anode-to-Cathode Forward Voltage, V_{AK}	40V
Anode-to-Cathode Reverse Voltage, V_{AKR}	40V
Gate-to-Cathode Forward Voltage, V_{GK}	40V
Gate-to-Anode Reverse Voltage, V_{GAR}	40V
Gate-to-Cathode Reverse Voltage, V_{GKR}	5V
Peak Recurrent Forward Current, 10μs 1% Duty Cycle	5A
Peak Gate Current, I_{GM}	250mA
Average Gate Current, $I_{G(AV)}$	50mA
Power Dissipation	
25°C Ambient	300mW
Derating Factor	2.4mW/°C
Storage Temperature Range	−55°C to +125°C
Operating Temperature Range	−55°C to +125°C

MECHANICAL SPECIFICATIONS

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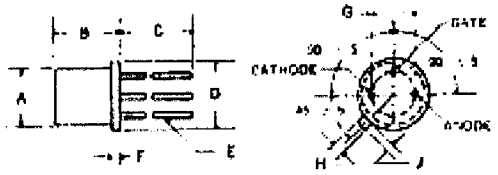

GATE CONNECTED TO CASE

	INCHES	MILLIMETERS
A	.178-.195 DIA	4.52-4.95 DIA
B	.170-.210	4.31-5.33
C	.5 MIN	12.70 MIN
D	.209-.230 DIA	5.31-5.84 DIA
E	.017 ± .002 DIA .001 DIA	.432 ± .051 .025
F	.020 MAX	.508 MAX
G	.100±.010 DIA	2.54±.254 DIA.
H	.041±.005	1.04±.127
J	.028-.045	.711-1.22

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ELECTRICAL SPECIFICATIONS (at 25°C unless noted)†

Test	Symbol	Figure	Minimum	Typical	Maximum	Units	Test Conditions
SUBGROUP 1 Visual and Mechanical	—	—	—	—	—	—	
SUBGROUP 2							
Gate-anode blocking current	I_{GAO}	2	—	2	10	nA	V_{AA} = Rating
Gate-cathode blocking current	I_{GKS}	3	—	5	100	nA	V_{GK} = Rating
SUBGROUP 3							
Peak-point anode current	I_P	1	— —	1 2.5	2 5	μA μA	R_G = 1 Meg / R_K = 10K } V_S = 10V
Peak-point offset voltage	V_T	1	0.2 0.2	0.26 0.35	1.6 0.6	V V	R_G = 1 Meg / R_K = 10K } V_S = 10V
Valley-point anode current	I_V	1	— 70 1.5	15 200 2	50 — —	μA μA mA	R_G = 1 Meg / R_K = 10K / R_G = 200Ω } V_S = 10V
SUBGROUP 4							
Forward on-state voltage	V_F	4	—	0.85	1.0	V	I_F = 50mA
Peak pulse voltage	V_o	5	9	12	—	V	
Peak pulse voltage rise time	t_r	5	—	50	80	ns	
SUBGROUP 5							
Gate-anode blocking current (125°C Test)	I_{GAO}	2	—	150	500	nA	V_{AA} = Rating
Valley-point anode current (125°C Test)	I_V	1	40	100	—	μA	R_G = 10K, V_S = 10V
Peak-point anode current (−55°C Test)	I_P	1	—	7.5	10	μA	R_G = 10K, V_S = 10V