

DIGITRON SEMICONDUCTORS

BY228

STANDARD RECOVERY RECTIFIER

MAXIMUM RATINGS ($T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified)

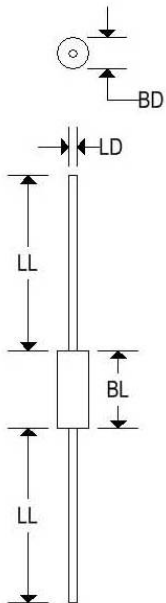
Parameter	Test condition	Symbol	Value	Unit
Reverse voltage		V_R	1500	V
Repetitive peak reverse voltage	$I_R = 100\mu\text{A}$	V_{RRM}	1650	V
Peak forward surge current	$t_p = 10\text{ms}$, half sinewave	I_{FSM}	50	A
Average forward current		I_{FAV}	3	A
Junction temperature		T_J	140	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-55 to +175	$^{\circ}\text{C}$
Non repetitive reverse avalanche energy	$I_{(BR)R} = 0.4\text{A}$	E_R	10	MJ
Junction ambient	On PC board with spacing 25mm	$R_{\theta JA}$	70	K/W

ELECTRICAL CHARACTERISTICS

Parameter	Test condition	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 5\text{A}$	V_F			1.5	V
Reverse current	$V_R = 1500\text{V}$	I_R		2	5	μA
	$V_R = 1500\text{V}$, $T_J = 140^{\circ}\text{C}$	I_R			140	μA
Total reverse recovery time	$I_F = 1\text{A}$, $-di/dt = 0.05\text{A}/\mu\text{s}$	t_{rr}			20	μs
Reverse recovery time	$I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $i_R = 0.25\text{A}$	t_{rr}			2	μs

MECHANICAL CHARACTERISTICS

Case	SOD-64
Marking	Body painted, alpha-numeric
Polarity	Cathode band



	SOD-64			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	0.169	0.250	4.300	6.350
BL	-	0.300	-	7.620
LD	0.048	0.053	1.219	1.350
LL	1.024	1.102	26.000	28.000

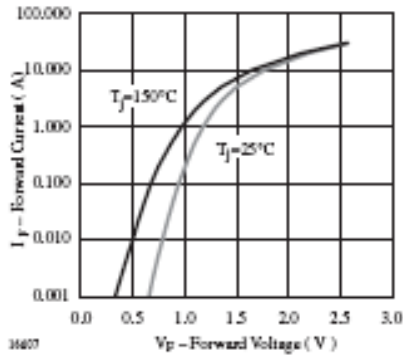
Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).

Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.

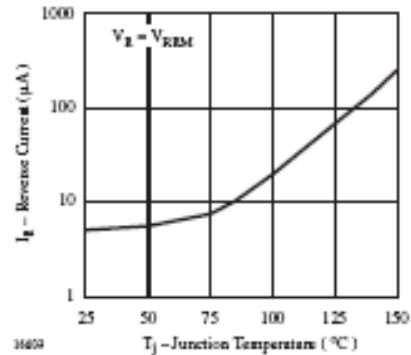
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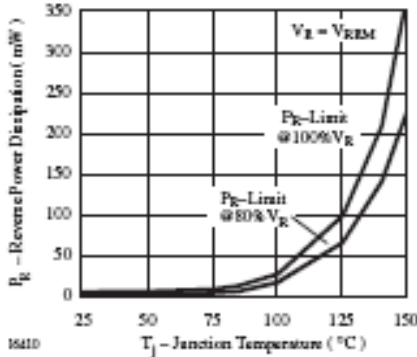
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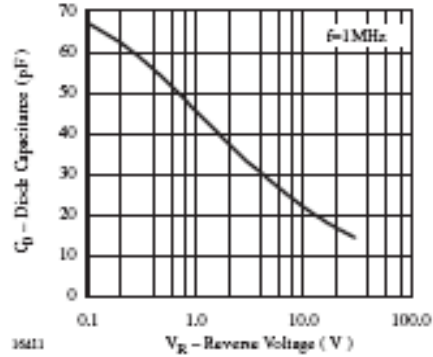
Forward Current vs. Forward Voltage



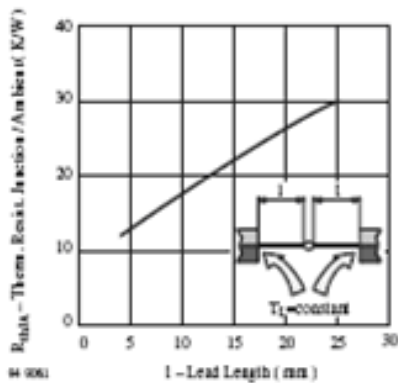
Reverse Current vs. Junction Temperature



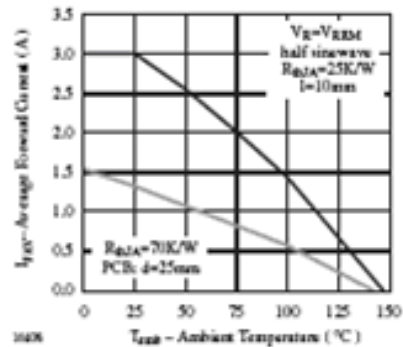
Max. Reverse Power Dissipation vs. Junction Temperature



Diode Capacitance vs. Reverse Voltage



Typ. Thermal Resistance vs. Lead Length



Max. Average Forward Current vs. Ambient Temperature