

TECHNICAL DATA
DATA SHEET 5090, REV. A

Ultrafast Recovery Rectifier

- Hermetic, non-cavity glass package
- Metallurgically bonded
- Operating and Storage Temperature: -65°C to +175°

MAX. RATINGS / ELECTRICAL CHARACTERISTICS All ratings are at $T_A = 25^\circ\text{C}$ unless otherwise specified.

Rating	Symbol	Condition	Max	Units
WORKING PEAK REVERSE VOLTAGE 1N6620, U, US 1N6621, U, US 1N6622, U, US 1N6623, U, US 1N6624, U, US 1N6625, U, US	V_{RWM}		200 400 600 800 900 1000	Volts
AVERAGE RECTIFIED FORWARD CURRENT 1N6620, U, US thru 1N6622, U, US 1N6623, U, US thru 1N6625, U, US	I_o		1.2 1.0	Amps
PEAK FORWARD SURGE CURRENT 1N6620, U, US thru 1N6624, U, US 1N6625, U, US	I_{FSM}	$T_p=8.3\text{ms}$	20 15	A(pk)
MAXIMUM REVERSE CURRENT 1N6620, U, US thru 1N6624, U, US 1N6625, U, US	$I_R @ V_{RWM}$	$T_j = 25^\circ\text{C}$	0.5 1.0	μAmps
MAXIMUM REVERSE CURRENT 1N6620, U, US thru 1N6624, U, US 1N6625, U, US	$I_R @ V_{RWM}$	$T_j = 150^\circ\text{C}$	150 200	μAmps
MAX. PEAK FORWARD VOLTAGE (PULSED) 1N6620, U, US thru 1N6622, U, US 1N6623, U, US & 1N6624, U, US 1N6625, U, US	V_{FM}	$I_F=2.0\text{A}$ $I_F=1.5\mu\text{A}$ $I_F=1.5\mu\text{A}$	1.60 1.80 1.95	Volts
PEAK RECOVERY CURRENT 1N6620, U, US thru 1N6622, U, US 1N6623, U, US & 1N6624, U, US 1N6625, U, US	I_{RM}	$I_F=2\text{A}$, $100\text{A}/\mu$	3.5 4.2 5.0	A(pk)
MAXIMUM REVERSE RECOVERY TIME 1N6620, U, US thru 1N6622, U, US 1N6623, U, US & 1N6624, U, US 1N6625, U, US	T_{rr}	$I_F=0.5\text{A}$ $I_{RM}=1.0\text{A}$	30 50 60	ns
FORWARD RECOVERY VOLTAGE 1N6620, U, US thru 1N6622, U, US 1N6623, U, US & 1N6624, U, US 1N6625, U, US	V_{FRM}	$I_F=0.5\text{A}$ $t_r=12\text{ns}$	12 18 30	Volts
THERMAL RESISTANCE (Axial) 1N6620 thru 1N6625	$R_{\theta JL}$	$L=.375$	38	$^\circ\text{C}/\text{W}$
THERMAL RESISTANCE (MELF) 1N6620U,US thru 1N6625U,US	$R_{\theta JC}$	$L=0$	20	$^\circ\text{C}/\text{W}$

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