DACO SEMICONDUCTOR

MURI2X60-17A

SUPER FAST DIODE MODULE TYPE 2X60A / 1700V

Features

- High Surge Capability
- Type 1700V V_{RRM}
- Isolation Type Package
- Electrically Isolation Base Plate
- RoHS Compliant

Maximum Ratings

Junction Operating Temperature : -55°C to +175°C

Storage Temperature : -55°C to +175°C

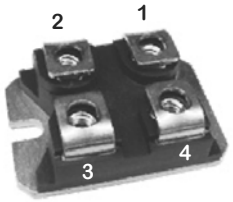
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURI2X60-17A	1700V	1190V	1700V

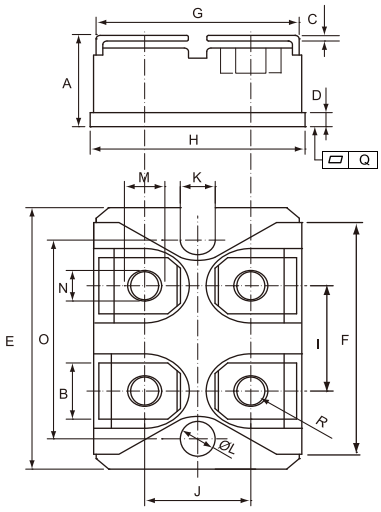
Electrical Characteristics @25°C Unless Otherwise Specified

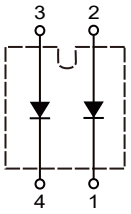
Average Forward Current (Per pkg) (Per diode)	$I_{F(AV)}$	120A 60A	T_C =125°C
Peak Forward Surge Current (Per diode)	I_{FSM}	2000A	8.3ms, half sine
Maximum Instantaneous Forward Voltage* (Per diode)	V_F	2.8V	I_{FM} =60A ; T_J =25°C
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* (Per diode)	I_R	20uA 3mA	T_J =25°C T_J =150°C
Maximum Reverse Recovery Time	T_{rr}	200ns	I_F =0.5A, I_R =1.0A I_{RR} =0.25A
Isolation Voltage (between All Terminals and Baseplate)	Viso	2500V	A.C. 1 minute
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.8°C/W	
Mounting Torque		1.3Nm 1.1Nm	To heatsink To terminal

*Pulse Test: Pulse Width 300 μsec, Duty Cycle < 2%

SOT-227







MURI | 2X60 – xxA

DIMENSIONS				
	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.460	0.483	11.68	12.28
B	0.307	0.323	7.80	8.20
C	0.030	0.033	0.75	0.85
D	0.071	0.081	1.80	2.05
E	1.488	1.504	37.80	38.20
F	1.248	1.260	31.70	32.00
G	0.917	0.957	23.30	24.30
H	0.996	1.008	25.30	25.60
I	0.579	0.602	14.70	15.30
J	0.492	0.516	12.50	13.10
K	0.161	0.169	4.10	4.30
L	0.161	0.169	4.10	4.30
M	0.181	0.197	4.60	5.00
N	0.165	0.181	4.20	4.60
O	1.181	1.197	30.00	30.40
Q	-0.002	0.004	-0.05	0.10
R	M4*8			

DYNAMIC CHARACTERISTICS

Symbol	Characteristic	Test Conditions	MIN	TYP	MAX	UNIT
T_{rr}	Reverse Recovery Time	I_F = 1A, di_F/dt = -100A/μs, V_R = 30V, T_J = 25°C	-	68	-	ns
T_{rr}	Reverse Recovery Time	I_F = 60A, di_F/dt = -200A/μs V_R = 800V, T_C = 25°C	-	174	-	
Q_{rr}	Reverse Recovery Charge		-	783	-	nC
I_{RRM}	Maximum Reverse Recovery Current		-	9.8	-	Amps
T_{rr}	Reverse Recovery Time	I_F = 60A, di_F/dt = -200A/μs V_R = 800V, T_C = 125°C	-	250	-	ns
Q_{rr}	Reverse Recovery Charge		-	3450	-	nC
I_{RRM}	Maximum Reverse Recovery Current		-	22	-	Amps
T_{rr}	Reverse Recovery Time	I_F = 60A, di_F/dt = -1000A/μs V_R = 800V, T_C = 125°C	-	150	-	ns
Q_{rr}	Reverse Recovery Charge		-	6654	-	nC
I_{RRM}	Maximum Reverse Recovery Current		-	70	-	Amps

Figure.1 - Typical Forward Characteristics

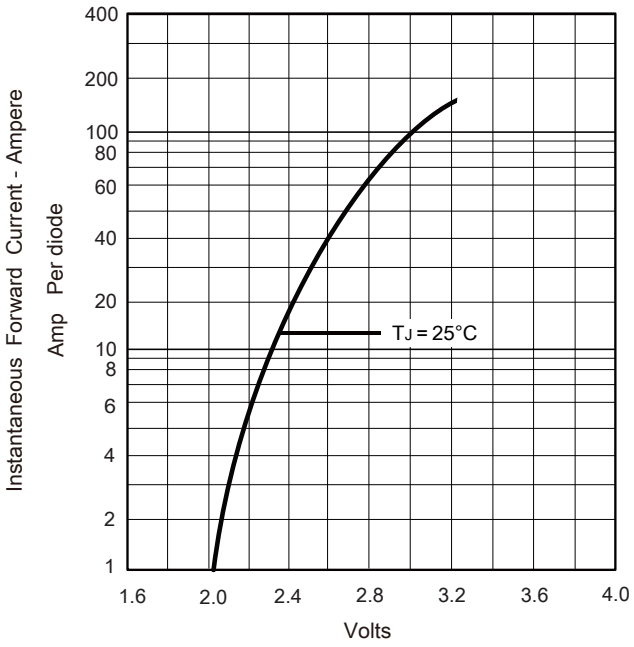


Figure.2 - Forward Derating Curve

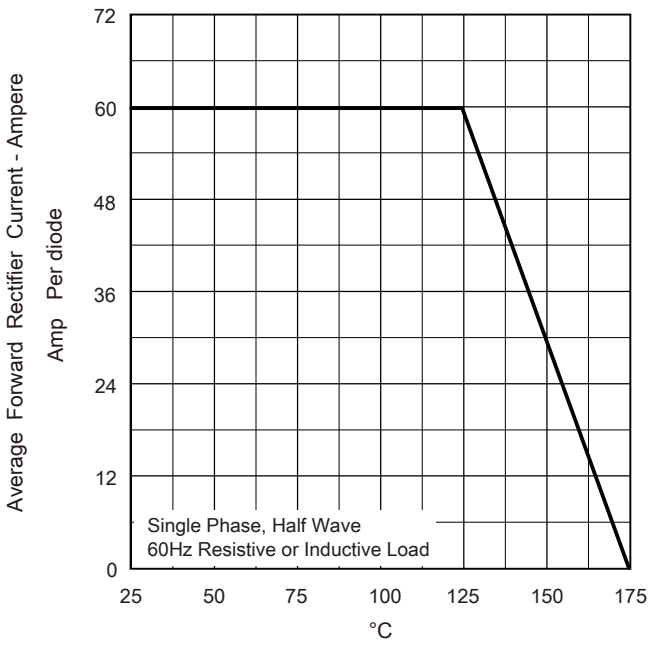


Figure.3 - Peak Forward Surge Current

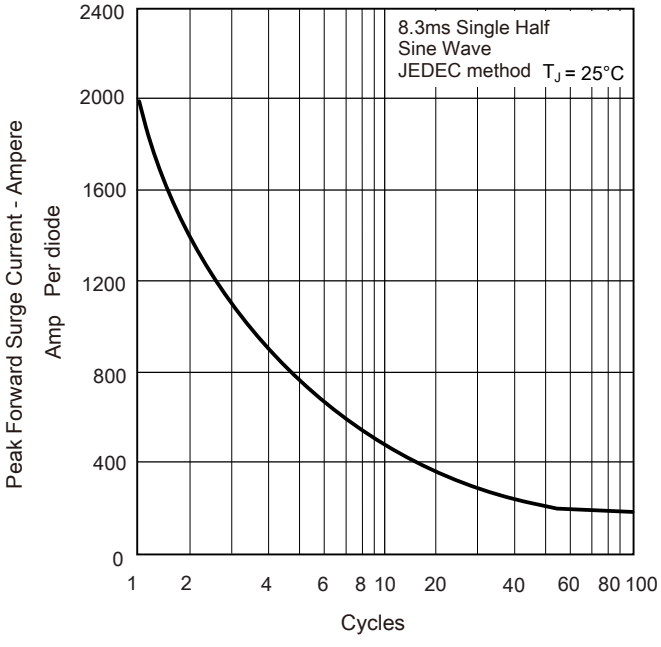
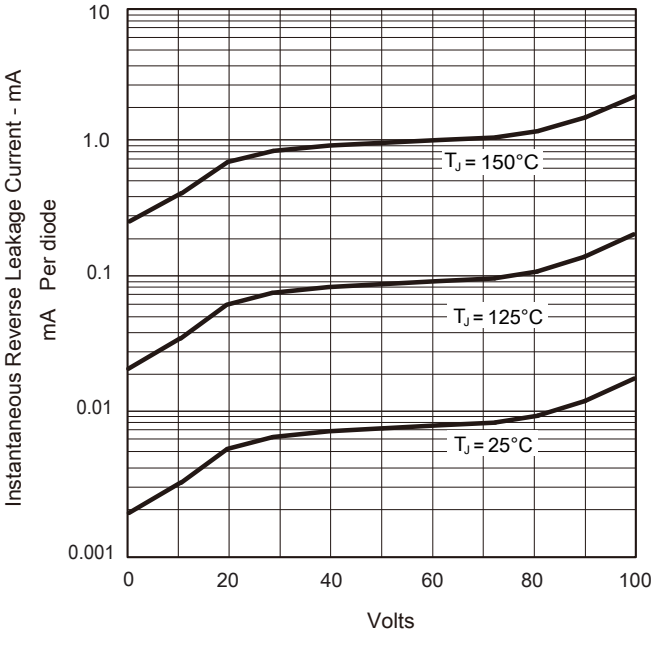


Figure.4 - Typical Reverse Characteristics



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