Absolute Maximum Ratings — Sensitive Triac (4 Quadrants)

Symbol	Parameter			Value	Unit
$I_{T(RMS)}$	RMS on-state current (full sine wave)	Lxx06Ly/Lxx06Vy/Lxx06Dy Lxx06Ry/Lxx06Ny	T_C = 80°C T_C = 85°C	6	A
I_{TSM}	Non repetitive surge peak on-state current (full cycle, T_J initial = 25°C)	f = 50 Hz	t = 20 ms	50	A
		f = 60 Hz	t = 16.7 ms	60	
I^2t	I^2t Value for fusing	t_p = 8.3 ms		15	A^2s
di/dt	Critical rate of rise of on-state current I_G = 50mA with 0.1µs rise time	f = 120 Hz	T_J = 110°C	70	A/µs
I_{GTM}	Peak gate trigger current	t_p=20µs	T_J = 110°C	4	A
$P_{G(AV)}$	Average gate power dissipation		T_J = 110°C	0.4	W
T_{stg}	Storage temperature range			-40 to 150	°C
T_J	Operating junction temperature range			-40 to 110	°C

Note: xx = voltage/10, y = sensitivity

Absolute Maximum Ratings — Standard Triac

Symbol	Parameter			Value	Unit
$I_{T(RMS)}$	RMS on-state current (full sine wave)	Qxx06Ry / Qxx06Ny	T_C = 95°C	6	A
		Qxx06Ly	T_C = 90°C		
I_{TSM}	Non repetitive surge peak on-state current (full cycle, T_J initial = 25°C)	f = 50 Hz	t = 20 ms	65	A
		f = 60 Hz	t = 16.7 ms	80	
I^2t	I^2t Value for fusing	t_p = 8.3 ms		26.5	A^2s
di/dt	Critical rate of rise of on-state current I_G = 200mA with 0.1µs rise time	f = 120 Hz	T_J = 125°C	70	A/µs
I_{GTM}	Peak gate trigger current	t_p=20µs	T_J = 125°C	4	A
$P_{G(AV)}$	Average gate power dissipation		T_J = 125°C	0.5	W
T_{stg}	Storage temperature range			-40 to 150	°C
T_J	Operating junction temperature range			-40 to 125	°C

Note: xx = voltage/10, y = sensitivity

Absolute Maximum Ratings — Alternistor Triac (3 Quadrants)

Symbol	Parameter				Value	Unit
$I_{T(RMS)}$	RMS on-state current (full sine wave)	Qxx06LHy/Qxx06VHy/Qxx06DHy		T_C = 95°C	6	A
		Qxx06RHy/Qxx06NHy		T_C = 100°C		
I_{TSM}	Non repetitive surge peak on-state current (full cycle, T_J initial = 25°C)	f = 50 Hz	t = 20 ms	Qxx06VHy Qxx06DHy	55	A
				Qxx06LHy Qxx06RHy Qxx06NHy	80	
		f = 60 Hz	t = 16.7 ms	Qxx06VHy Qxx06DHy	65	
				Qxx06LHy Qxx06RHy Qxx06NHy	85	
I^2t	I^2t Value for fusing	t_p = 8.3 ms		Qxx06VHy Qxx06DHy	17.5	A^2s
				Qxx06LHy Qxx06RHy Qxx06NHy	30	
di/dt	Critical rate of rise of on-state current	f = 120 Hz		T_J = 125°C	70	A/µs
I_{GTM}	Peak gate trigger current	$t_p \le 10$ µs; $I_{GT} \le I_{GTM}$		T_J = 125°C	1.6	A
$P_{G(AV)}$	Average gate power dissipation			T_J = 125°C	0.5	W
T_{stg}	Storage temperature range				-40 to 150	°C
T_J	Operating junction temperature range				-40 to 125	°C

Note: xx = voltage/10, y = sensitivity

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Electrical Characteristics (T_J = 25°C, unless otherwise specified) — Sensitive Triac (4 Quadrants)

Symbol	Test Conditions	Quadrant		Value			Unit
				Lxx06x5	Lxx06x6	Lxx06x8	
I_{GT}	V_D = 12V R_L = 60 Ω	I – II – III IV	MAX.	5 5	5 10	10 20	mA
V_{GT}	V_D = 12V R_L = 60 Ω	ALL	MAX.	1.3			V
V_{GD}	$V_D = V_{DRM}$ R_L = 3.3 kΩ T_J = 110°C	ALL	MIN.	0.2			V
I_H	I_T = 100mA		MAX.	10	10	20	mA
dv/dt	$V_D = V_{DRM}$ Gate Open T_J = 100°C	400V	TYP.	30	30	40	V/µs
		600V		20	20	30	
(dv/dt)c	(di/dt)c = 3.2 A/ms T_J = 110°C		TYP.	1	2	2	V/µs
t_{gt}	I_G = 2 x I_{GT} PW = 15µs I_T = 8.5 A(pk)		TYP.	3.0	3.0	3.2	µs

Electrical Characteristics (T_J = 25°C, unless otherwise specified) — Standard Triac

Symbol	Test Conditions	Quadrant		Value		Unit
				Qxx06x4	Qxx06x5	
I_{GT}	V_D = 12V R_L = 60 Ω	I – II – III IV	MAX. TYP.	25 50	50 75	mA
V_{GT}	V_D = 12V R_L = 60 Ω	I – II – III	MAX.	1.3		V
V_{GD}	$V_D = V_{DRM}$ R_L = 3.3 kΩ T_J = 125°C	ALL	MIN.	0.2		V
I_H	I_T = 200mA		MAX.	50	50	mA
dv/dt	$V_D = V_{DRM}$ Gate Open T_J = 125°C	400V	MIN.	120		V/µs
		600V			100	
		800V			85	
	$V_D = V_{DRM}$ Gate Open T_J = 100°C	1000V			100	
(dv/dt)c	(di/dt)c = 3.2 A/ms T_J = 125°C		TYP.	4	4	V/µs
t_{gt}	I_G = 2 x I_{GT} PW = 15µs I_T = 8.5 A(pk)		TYP.	3.0	3.0	µs

Electrical Characteristics (T_J = 25°C, unless otherwise specified) — Alternistor Triac (3 Quadrants)

Symbol	Test Conditions	Quadrant			Value		Unit
					Qxx06xH3	Qxx06xH4	
I_{GT}	V_D = 12V R_L = 60 Ω	I – II – III	MAX.		10	35	mA
V_{GT}	V_D = 12V R_L = 60 Ω	I – II – III	MAX.		1.3		V
V_{GD}	$V_D = V_{DRM}$ R_L = 3.3 kΩ T_J = 125°C	I – II – III	MIN.		0.2		V
I_H	I_T = 100mA		MAX.		15	35	mA
dv/dt	$V_D = V_{DRM}$ Gate Open T_J = 125°C	Qxx06VHy / Qxx06DHy	MIN.	400V	75	400	V/µs
				600V	50	300	
				800V		200	
		Qxx06LHy / Qxx06RHy / Qxx06NHy		400V	75	450	
				600V	50	350	
				800V		250	
	$V_D = V_{DRM}$ Gate Open T_J = 100°C	ALL		1000V		150	
(dv/dt)c	(di/dt)c = 3.2 A/ms T_J = 125°C		MIN.		20	25	V/µs
t_{gt}	I_G = 2 x I_{GT} PW = 15µs I_T = 8.5 A(pk)		TYP.		4.0	4.0	µs

Note: xx = voltage/10, x = package, y = sensitivity

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Static Characteristics

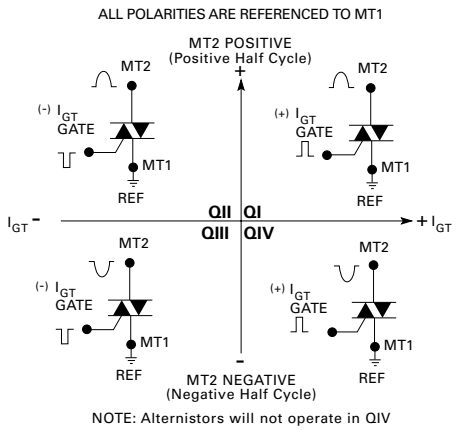
Symbol	Test Conditions					Value	Unit
V_{TM}	I_{TM} = 11.3A t_p = 380 µs				MAX.	1.60	V
I_{DRM} / I_{RRM}	V_{DRM} = V_{RRM}	Lxx06xy	T_J = 25°C	400 - 600V	MAX.	20	µA
			T_J = 110°C	400 - 600V		0.5	mA
		Qxx06xy	T_J = 25°C	400 - 1000V		50	µA
			T_J = 125°C	400 - 800V		2	mA
			T_J = 100°C	1000V		3	
		Qxx06xHy	T_J = 25°C	400 - 800V		10	µA
				1000V		20	
			T_J = 125°C	400 - 800V		3	mA
			T_J = 100°C	1000V		2	

Thermal Resistances

Symbol	Parameter		Value	Unit
$R_{\Theta(J-C)}$	Junction to case (AC)	L/Qxx06Ryy / L/Qxx06Nyy	1.8	°C/W
		L/Qxx06Lyy	3.3	
		L/Qxx06Vyy / L/Qxx06Dyy	3.2	
$R_{\Theta(J-A)}$	Junction to ambient	L/Qxx06Ryy	45	°C/W
		L/Qxx06Lyy	50	
		L/Qxx06Vyy	70	

Note: xx = voltage, x = package, y = sensitivity, yy = type & sensitivity

Figure 1: Definition of Quadrants



Note: Alternistors will not operate in QIV

Figure 2: Normalized DC Gate Trigger Current for All Quadrants vs. Junction Temperature

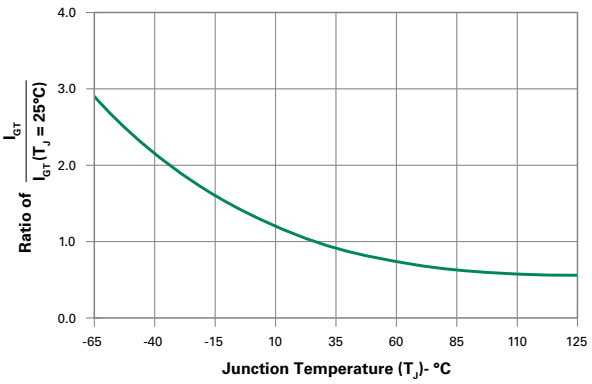


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Figure 3: Normalized DC Holding Current vs. Junction Temperature

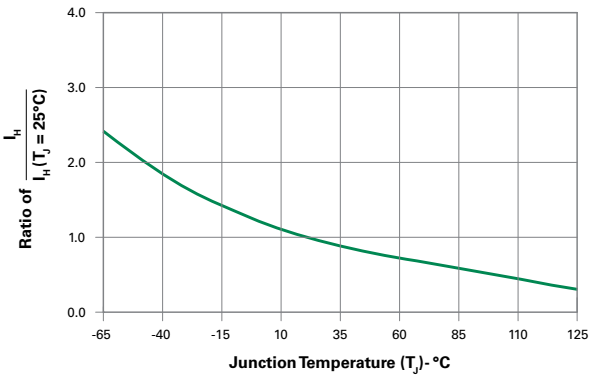

Figure 4: Normalized DC Gate Trigger Voltage for All Quadrants vs. Junction Temperature

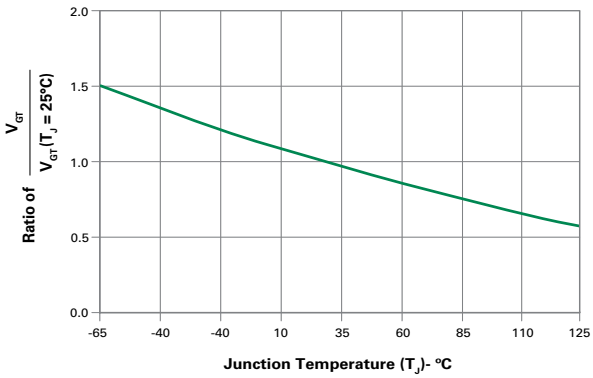

Figure 5: Power Dissipation (Typical) vs. RMS On-State Current

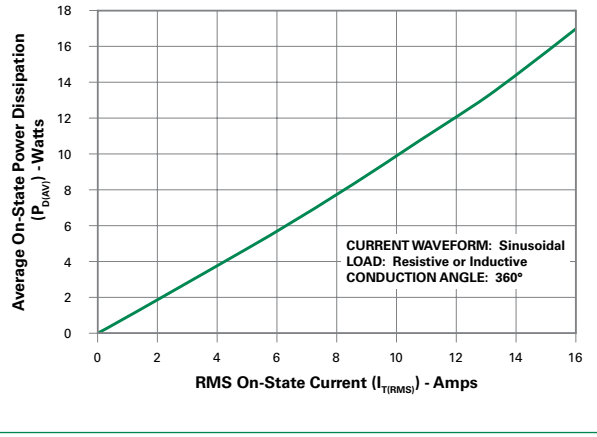

Figure 6: Maximum Allowable Case Temperature vs. On-State Current (Sensitive Triac)

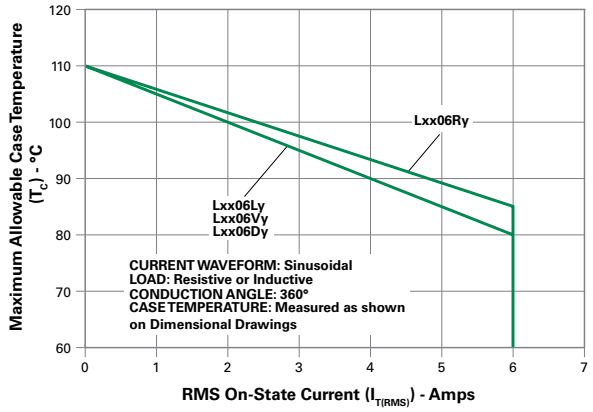

Figure 7: Maximum Allowable Case Temperature vs. On-State Current (Standard Triac)

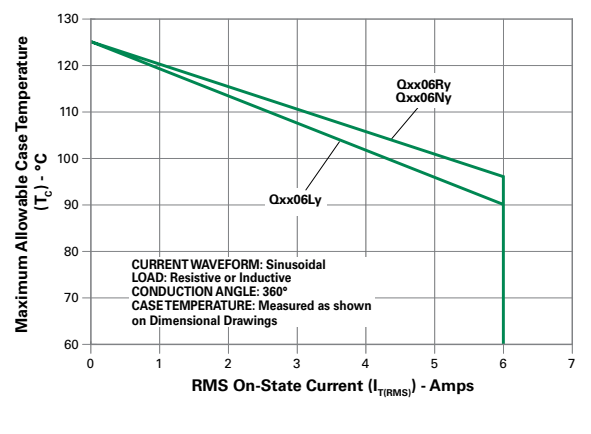

Figure 8: Maximum Allowable Case Temperature vs. On-State Current (Alternistor Triac)

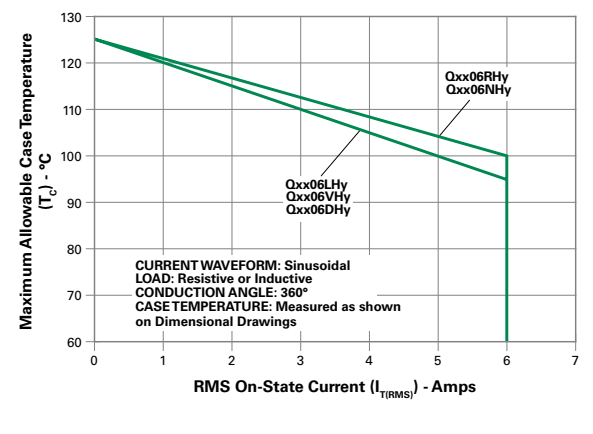

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Figure 9: Maximum Allowable Ambient Temperature vs. On-State Current (Sensitive / Standard Triac)

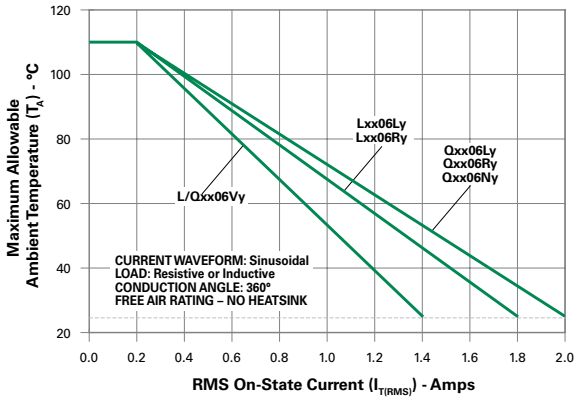


Figure 10: Maximum Allowable Ambient Temperature vs. On-State Current (Alternistor Triac)

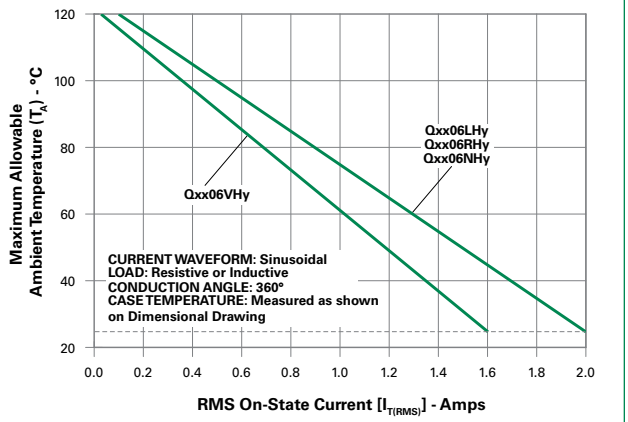


Figure 11: On-State Current vs. On-State Voltage (Typical)

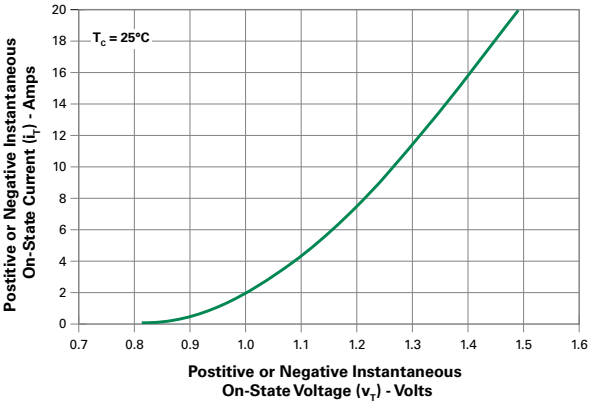
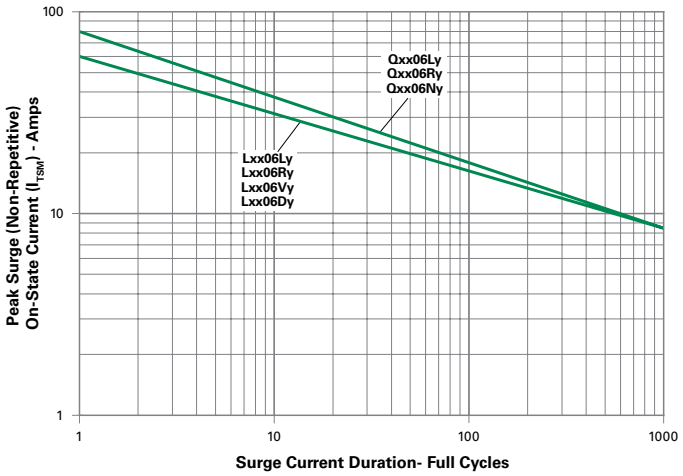


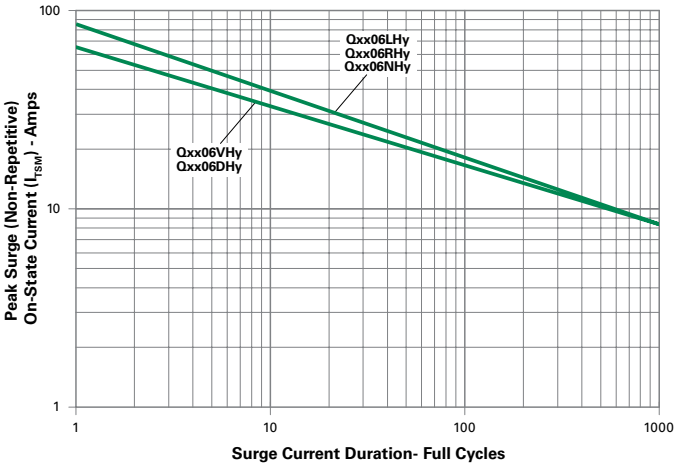
Figure 12: Surge Peak On-State Current vs. Number of Cycles (Sensitive / Standard Triac)



SUPPLY FREQUENCY: 60 Hz Sinusoidal
LOAD: Resistive
RMS On-State Current: [$I_{T(RMS)}$]: Maximum Rated Value at Specified Case Temperature

Notes:
1. Gate control may be lost during and immediately following surge current interval.
2. Overload may not be repeated until junction temperature has returned to steady-state rated value.

Figure 13: Surge Peak On-State Current vs. Number of Cycles (Alternistor Triac)



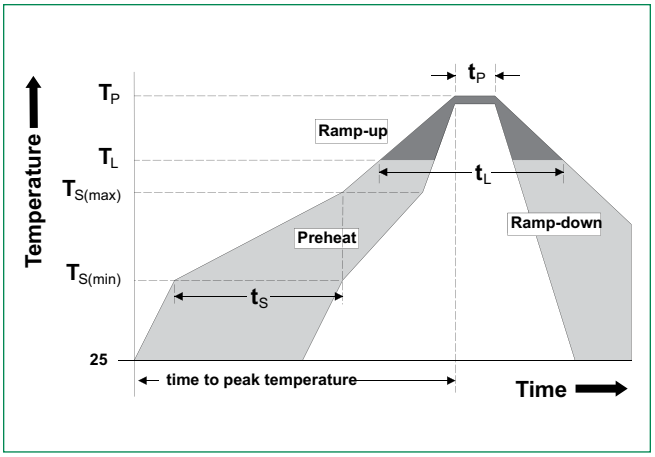
SUPPLY FREQUENCY: 60 Hz Sinusoidal
LOAD: Resistive
RMS On-State Current: [$I_{T(RMS)}$]: Maximum Rated Value at Specified Case Temperature

Notes:
1. Gate control may be lost during and immediately following surge current interval.
2. Overload may not be repeated until junction temperature has returned to steady-state rated value.

Note: xx = voltage/10, x = package, y = sensitivity,

Soldering Parameters

Reflow Condition		Pb – Free assembly
Pre Heat	**- Temperature Min ($T_{s(min)}$)**	150°C
	- Temperature Max ($T_{s(max)}$)	200°C
	- Time (min to max) (t_s)	60 – 120 secs
Average ramp up rate (Liquidus Temp) (T_L) to peak		3°C/second max
$T_{S(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	**- Temperature (T_L) (Liquidus)**	217°C
	- Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_P)		$260^{+0/-5}$ °C
Time within 5°C of actual peak Temperature (t_p)		30 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max.
Do not exceed		280°C



Physical Specifications

Terminal Finish	100% Matte Tin-plated
Body Material	UL Recognized compound meeting flammability rating V-0
Terminal Material	Copper Alloy

Design Considerations

Careful selection of the correct components for the application's operating parameters and environment will go a long way toward extending the operating life of the Thyristor. Good design practice should limit the maximum continuous current through the main terminals to 75% of the components rating. Other ways to ensure long life for a power discrete semiconductor are proper heat sinking and selection of voltage ratings for worst case conditions. Overheating, overvoltage (including dv/dt), and surge currents are the main killers of semiconductors. Correct mounting, soldering, and forming of the leads also help protect against component damage.

Environmental Specifications

Test	Specifications and Conditions
AC Blocking (V_{DRM})	MIL-STD-750, M-1040, Cond A Applied Peak AC voltage @ 125°C for 1008 hours
Temperature Cycling	MIL-STD-750, M-1051, 100 cycles; -40°C to +150°C; 15-min dwell-time
Temperature/Humidity	EIA / JEDEC, JESD22-A101 1008 hours; 320V - DC: 85°C; 85% rel humidity
High Temp Storage	MIL-STD-750, M-1031, 1008 hours; 150°C
Low-Temp Storage	1008 hours; -40°C
Resistance to Solder Heat	MIL-STD-750 Method 2031
Solderability	ANSI/J-STD-002, category 3, Test A
Lead Bend	MIL-STD-750, M-2036 Cond E

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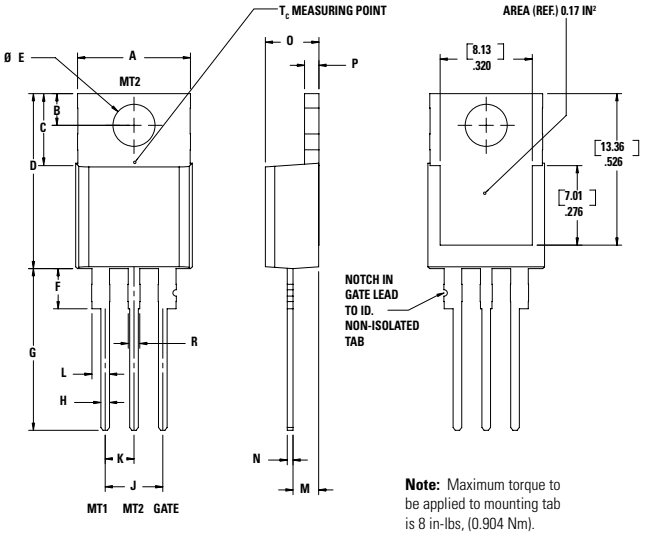
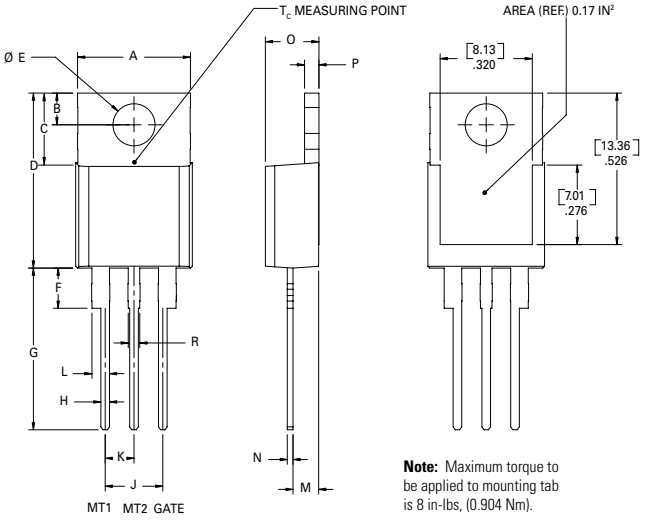
Dimensions — TO-220AB (R-Package) — Non-Isolated Mounting Tab Common with Center Lead



Note: Maximum torque to be applied to mounting tab is 8 in-lbs, (0.904 Nm).

Dimension	Inches		Millimeters	
	Min	Max	Min	Max
A	0.380	0.420	9.65	10.67
B	0.105	0.115	2.67	2.92
C	0.230	0.250	5.84	6.35
D	0.590	0.620	14.99	15.75
E	0.142	0.147	3.61	3.73
F	0.110	0.130	2.79	3.30
G	0.540	0.575	13.72	14.61
H	0.025	0.035	0.64	0.89
J	0.195	0.205	4.95	5.21
K	0.095	0.105	2.41	2.67
L	0.060	0.075	1.52	1.91
M	0.085	0.095	2.16	2.41
N	0.018	0.024	0.46	0.61
O	0.178	0.188	4.52	4.78
P	0.045	0.060	1.14	1.52
R	0.038	0.048	0.97	1.22

Dimensions — TO-220AB (L-Package) — Isolated Mounting Tab



Note: Maximum torque to be applied to mounting tab is 8 in-lbs, (0.904 Nm).

Dimension	Inches		Millimeters	
	Min	Max	Min	Max
A	0.380	0.420	9.65	10.67
B	0.105	0.115	2.67	2.92
C	0.230	0.250	5.84	6.35
D	0.590	0.620	14.99	15.75
E	0.142	0.147	3.61	3.73
F	0.110	0.130	2.79	3.30
G	0.540	0.575	13.72	14.61
H	0.025	0.035	0.64	0.89
J	0.195	0.205	4.95	5.21
K	0.095	0.105	2.41	2.67
L	0.060	0.075	1.52	1.91
M	0.085	0.095	2.16	2.41
N	0.018	0.024	0.46	0.61
O	0.178	0.188	4.52	4.78
P	0.045	0.060	1.14	1.52
R	0.038	0.048	0.97	1.22

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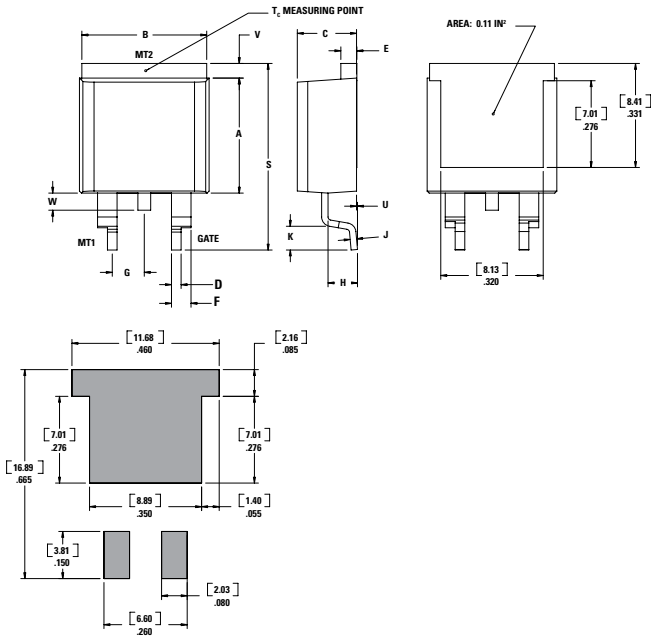
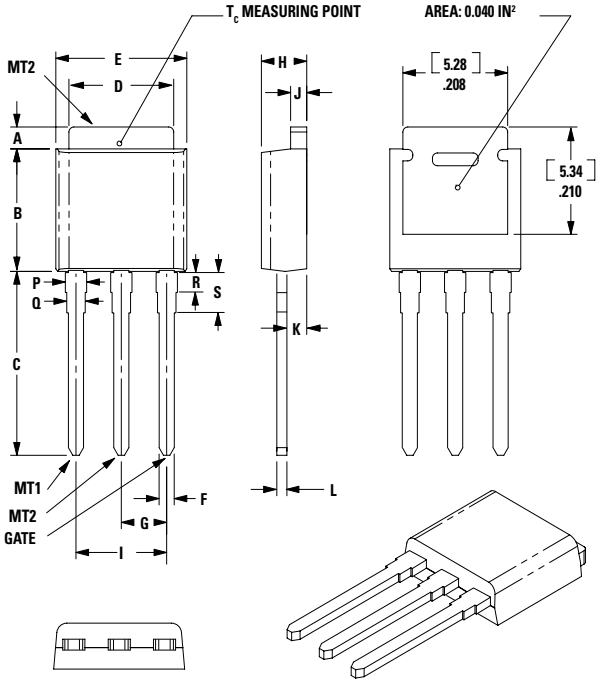
Dimensions — TO-263AB (N-Package) — D²-PAK Surface Mount



Dimension	Inches		Millimeters	
	Min	Max	Min	Max
A	0.360	0.370	9.14	9.40
B	0.380	0.420	9.65	10.67
C	0.178	0.188	4.52	4.78
D	0.025	0.035	0.64	0.89
E	0.045	0.060	1.14	1.52
F	0.060	0.075	1.52	1.91
G	0.095	0.105	2.41	2.67
H	0.092	0.102	2.34	2.59
J	0.018	0.024	0.46	0.61
K	0.090	0.110	2.29	2.79
S	0.590	0.625	14.99	15.88
V	0.035	0.045	0.89	1.14
U	0.002	0.010	0.05	0.25
W	0.040	0.070	1.02	1.78

Dimensions — TO-251AA (V-Package) — V-PAK Through Hole



Dimension	Inches			Millimeters		
	Min	Typ	Max	Min	Typ	Max
A	0.037	0.040	0.043	0.94	1.01	1.09
B	0.235	0.242	0.245	5.97	6.15	6.22
C	0.350	0.361	0.375	8.89	9.18	9.53
D	0.205	0.208	0.213	5.21	5.29	5.41
E	0.255	0.262	0.265	6.48	6.66	6.73
F	0.027	0.031	0.033	0.69	0.80	0.84
G	0.087	0.090	0.093	2.21	2.28	2.36
H	0.085	0.092	0.095	2.16	2.34	2.41
I	0.176	0.180	0.184	4.47	4.57	4.67
J	0.018	0.020	0.023	0.46	0.51	0.58
K	0.035	0.037	0.039	0.90	0.95	1.00
L	0.018	0.020	0.023	0.46	0.52	0.58
P	0.042	0.047	0.052	1.06	1.20	1.32
Q	0.034	0.039	0.044	0.86	1.00	1.11
R	0.034	0.039	0.044	0.86	1.00	1.11
S	0.074	0.079	0.084	1.86	2.00	2.11

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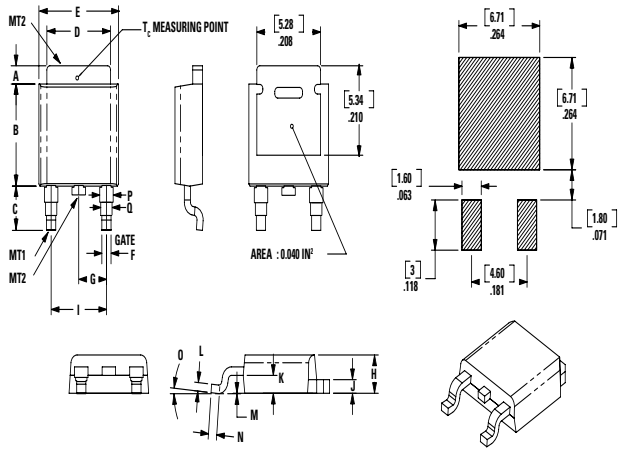
Thyristors

6 Amp Sensitive, Standard & Alternistor (High Commutation) Triacs

Dimensions — TO-252AA (D-Package) — D-PAK Surface mount



Dimension	Inches			Millimeters		
	Min	Typ	Max	Min	Typ	Max
A	0.037	0.040	0.043	0.94	1.01	1.09
B	0.235	0.243	0.245	5.97	6.16	6.22
C	0.106	0.108	0.113	2.69	2.74	2.87
D	0.205	0.208	0.213	5.21	5.29	5.41
E	0.255	0.262	0.265	6.48	6.65	6.73
F	0.027	0.031	0.033	0.69	0.80	0.84
G	0.087	0.090	0.093	2.21	2.28	2.36
H	0.085	0.092	0.095	2.16	2.33	2.41
I	0.176	0.179	0.184	4.47	4.55	4.67
J	0.018	0.020	0.023	0.46	0.51	0.58
K	0.035	0.037	0.039	0.90	0.95	1.00
L	0.018	0.020	0.023	0.46	0.51	0.58
M	0.000	0.000	0.004	0.00	0.00	0.10
N	0.021	0.026	0.027	0.53	0.67	0.69
O	0°	0°	5°	0°	0°	5°
P	0.042	0.047	0.052	1.06	1.20	1.32
Q	0.034	0.039	0.044	0.86	1.00	1.11

Product Selector

Part Number	Voltage				Gate Sensitivity Quadrants		Type	Package
	400V	600V	800V	1000V	I - II - III	IV		
Lxx06L5	X	X	-	-	5 mA	5 mA	Sensitive Triac	TO-220L
Lxx06D5	X	X	-	-	5 mA	5 mA	Sensitive Triac	TO-252 D-PAK
Lxx06R5	X	X	-	-	5mA	5mA	Sensitive Triac	TO-220R
Lxx06V5	X	X	-	-	5 mA	5 mA	Sensitive Triac	TO-251 V-PAK
Lxx06L6	X	X	-	-	5 mA	10 mA	Sensitive Triac	TO-220L
Lxx06D6	X	X	-	-	5 mA	10 mA	Sensitive Triac	TO-252 D-PAK
Lxx06R6	X	X	-	-	5mA	10mA	Sensitive Triac	TO-220R
Lxx06V6	X	X	-	-	5 mA	10 mA	Sensitive Triac	TO-251 V-PAK
Lxx06L8	X	X	-	-	10 mA	20 mA	Sensitive Triac	TO-220L
Lxx06D8	X	X	-	-	10 mA	20 mA	Sensitive Triac	TO-252 D-PAK
Lxx06R8	X	X	-	-	10mA	20mA	Sensitive Triac	TO-220R
Lxx06V8	X	X	-	-	10 mA	20 mA	Sensitive Triac	TO-251 V-PAK
Qxx06VH3	X	X	-	-	10 mA	-	Alternistor Triac	TO-251 V-PAK
Qxx06DH3	X	X	-	-	10 mA	-	Alternistor Triac	TO-252 D-PAK
Qxx06L4	X	-	-	-	25 mA	-	Standard Triac	TO-220L
Qxx06R4	X	-	-	-	25 mA	-	Standard Triac	TO-220R
Qxx06N4	X	-	-	-	25 mA	-	Standard Triac	TO-263 D²-PAK
Qxx06LH3	X	X	-	-	10mA	-	Alternistor Triac	TO-220L
Qxx06RH3	X	X	-	-	10mA	-	Alternistor Triac	TO-220R
Qxx06LH4	X	X	X	X	35 mA	-	Alternistor Triac	TO-220L
Qxx06RH4	X	X	X	X	35 mA	-	Alternistor Triac	TO-220R
Qxx06VH4	X	X	X	X	35 mA	-	Alternistor Triac	TO-251 V-PAK
Qxx06DH4	X	X	X	X	35 mA	-	Alternistor Triac	TO-252 D-PAK
Qxx06NH4	X	X	X	X	35 mA	-	Alternistor Triac	TO-263 D²-PAK
Qxx06L5	-	X	X	X	50 mA	-	Standard Triac	TO-220L
Qxx06R5	-	X	X	X	50 mA	-	Standard Triac	TO-220R
Qxx06N5	-	X	X	X	50 mA	-	Standard Triac	TO-263 D²-PAK

Packing Options

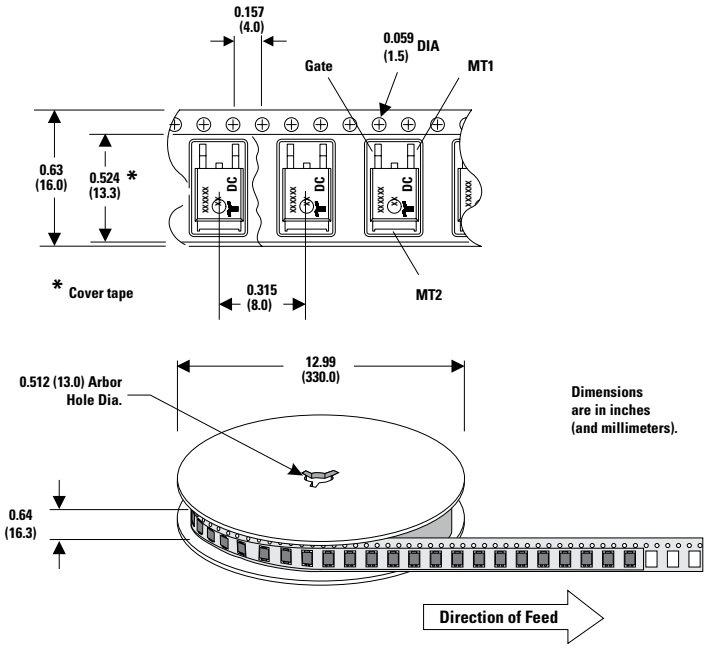
Part Number	Marking	Weight	Packing Mode	Base Quantity
Lxx06L/RyTP	Lxx06L/Ry	2.2 g	Tube Pack	1000 (50 per tube)
Lxx06DyTP	Lxx06Dy	0.3 g	Tube	750 (75 per tube)
Lxx06DyRP	Lxx06Dy	0.3 g	Embossed Carrier	2500
Lxx06VyTP	Lxx06Vy	0.4 g	Tube	750 (75 per tube)
Qxx06L/RyyTP	Qxx06L/Ryy	2.2 g	Tube Pack	1000 (50 per tube)
Qxx06NyyTP	Qxx06Nyy	1.6 g	Tube	1000 (50 per tube)
Qxx06NyyRP	Qxx06Nyy	1.6 g	Embossed Carrier	500
Qxx06DyyTP	Qxx06Dyy	0.3 g	Tube	750 (75 per tube)
Qxx06DyyRP	Qxx06Dyy	0.3 g	Embossed Carrier	2500
Qxx06VyyTP	Qxx06Vyy	0.4 g	Tube	750 (75 per tube)

Note: xx = voltage/10; yy = sensitivity

Revised: TK.09/28/21

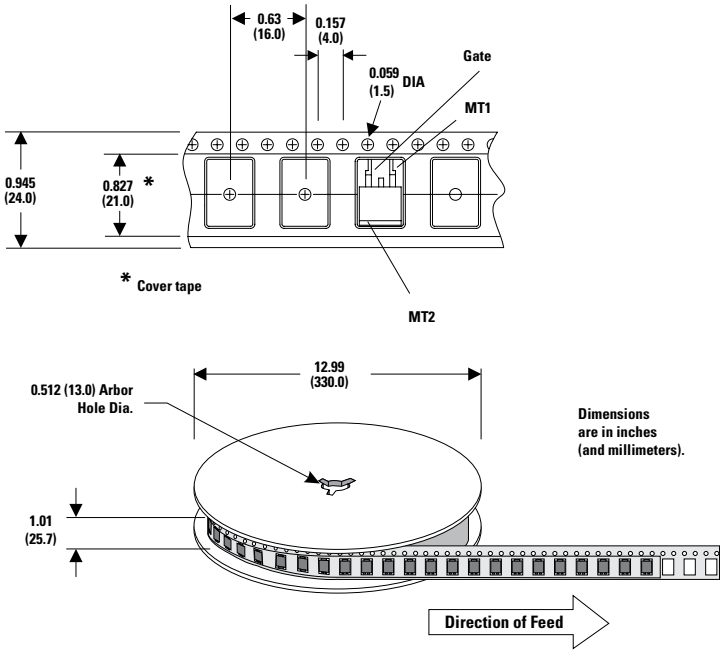
TO-252 Embossed Carrier Reel Pack (RP) Specifications

Meets all EIA-481-2 Standards



TO-263 Embossed Carrier Reel Pack (RP) Specifications

Meets all EIA-481-2 Standards



Revised: TK.09/28/21

Thyristors

6 Amp Sensitive, Standard & Alternistor (High Commutation) Triacs

Part Numbering System

Q 60 06 L H4 56

Component Type
L : Sensitive Triac
Q : Triac or Alternistor

Voltage Rating
40 : 400V
60 : 600V
80: 800V
K0 : 1000V

Current
06: 6A

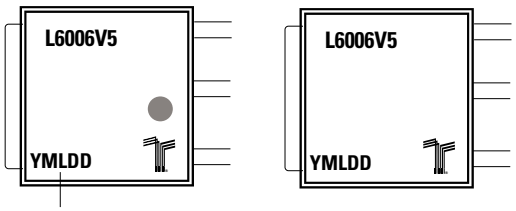
Package Type
L : TO-220 Isolated
R : TO-220 Non-Isolated
N: TO-263 (D^2PAK)
V : TO-251 (VPAK)
D : TO-252 (DPAK)

Sensitivity & Type
Sensitive Triac:
3 : 3 mA (QI, II, III, IV)
5 : 5 mA (QI, II, III, IV)
6 : 5 mA (QI, II, III)
10 mA (QIV)
8 : 10 mA (QI, II, III)
20 mA (QIV)
Standard Triac:
4 : 25 mA (QI, II, III)
5 : 50 mA (QI, II, III)
Alternistor Triac:
H3 : 10 mA (QI, II, III)
H4 : 35 mA (QI, II, III)

Lead from Dimensions
xx : Lead Form Option

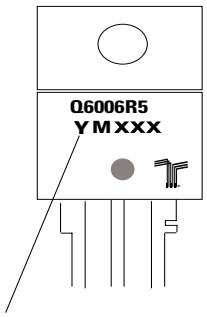
Part Marking System

TO-251AA- (V Package)
TO-252AA- (D Package)



Date Code Marking
Y:Year Code
M: Month Code
L: Location Code
DD: Calendar Code

TO-220 AB - (L and R Package)
TO-263 AB - (N Package)



Date Code Marking
Y:Year Code
M: Month Code
XXX: Lot Trace Code

Revised: TK.09/28/21

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

Q4006DH3 Q4006VH4 Q4006L4 Q4006R4 QK006L5 QK006LH4 L4006L556 Q6004V4 Q6008DH3 Q8006RH4 Q8006DH4 Q8006DH3 Q6008VH3 L4006L6 L4006L8 L4006L5 QK006R5 L6006L8 L6006L5 L6006L6 Q4006VH3 Q2006L4 Q4006DH4 Q8006L5 Q8006R5 Q6006VH3 Q2006VH4 L2006L5 L2006L6 L2006L8 Q2006R4 Q6006DH3 QK006VH4 QK006RH4 Q6006RH4 Q2006RH4 Q4006RH4 Q2006VH3 Q8006VH3 L6006L656 Q6006L5 Q6006LH4 Q8006LH4 Q6006R5 Q2006LH4 Q4006LH4 Q8006N5TP QK006N5TP QK006N5RP Q8006N5RP Q6006N5RP Q4006VH3TP Q6006VH3TP L2006D5RP L6006D5RP L4006D5RP L4006D5TP L2006D5TP L6006D5TP Q2006VH3TP Q2006N4RP Q4006N4RP Q2006N4TP Q4006N4TP Q6006DH3RP Q6006DH3TP Q2006DH3TP Q2006DH3RP Q4006DH3RP Q4006DH3TP L4006V5TP L2006V5TP L6006V5TP Q2006VH4TP L4006D8TP L2006D8TP L6006D8TP L2006D8RP L6006D8RP L4006D8RP Q4006DH4RP Q4006DH4TP QK006NH4TP QK006NH4RP L6006D6TP L2006D6TP L4006D6TP L4006D6RP L2006D6RP L6006D6RP Q8006RH4TP QK006VH4TP Q8006VH4TP Q8006DH4TP Q8006DH4RP Q6006LH4TP Q4006VH4TP Q6006VH4TP Q6006DH4TP Q6006DH4RP