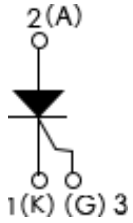
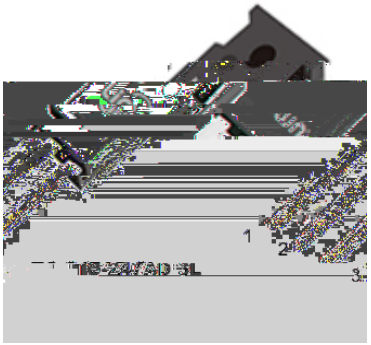
LCR1635

$I_{T(AV)}$	35 A
V_{DRM}/V_{RRM}	1600 V
I_{GT}	20-60 mA
T_J	-40°C to +125°C

- Flexible solution for reliable AC power rectification
- Easy control peak current at charger power up to reduce passive / electromechanical components



- Typical usage is in input rectification crowbar (soft start) and AC switch in motor control, UPS, welding and battery charge



LCR1635 high voltage series of silicon controlled rectifiers are specifically designed for medium power switching and phase control applications.

$I_{T(AV)}$	Sinusoidal waveform	35	A
I_{RMS}		55	
V_{RRM}/V_{DRM}		1600	V
I_{TSM}		550	A
V_T	40 A, T_J = 25 °C	1.4	V
dv/dt		1000	V/µs
di/dt		100	A/µs
T_J		-40 to +125	°C

Maximum average on-state current	$I_{T(AV)}$	T_C = 79 °C, 180° conduction half sine wave		35	A
Maximum continuous RMS on-state current as AC switch	$I_{T(RMS)}$			55	
Maximum peak, one-cycle non-repetitive surge current	I_{TSM}	10 ms sine pulse, rated V_{RRM} applied	Initial $T_J = T_J$ max.	550	
		10 ms sine pulse, no voltage reapplied		500	
Maximum I^2t for fusing	I^2t	10 ms sine pulse, rated V_{RRM} applied		880	A^2s
		10 ms sine pulse, no voltage reapplied		1250	
Maximum $I^2 t$ for fusing	$I^2 t$	t = 0.1 ms to 10 ms, no voltage reapplied		12 500	$A^2 s$
Low level value of threshold voltage	$V_{T(TO)1}$	T_J = 125 °C		1.02	V
High level value of threshold voltage	$V_{T(TO)2}$			1.23	
Low level value of on-state slope resistance	r_{t1}			9.74	m
High level value of on-state slope resistance	r_{t2}			7.50	
Maximum peak on-state voltage	V_{TM}				

Maximum junction and storage temperature range	T_J, T_{Stg}		-40 to +125	°C
Maximum thermal resistance, junction to case	R_{thJC}	DC operation	0.6	°C/W
Maximum thermal resistance, junction to ambient	R_{thJA}		40	
Maximum thermal resistance, case to heat sink	R_{thCS}	Mounting surface, smooth, and greased	0.25	
Approximate weight			6	g
			0.21	oz ! s> mbient

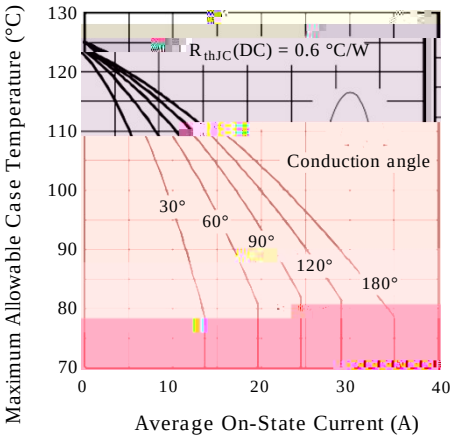


Fig. 1 - Current Rating Characteristics

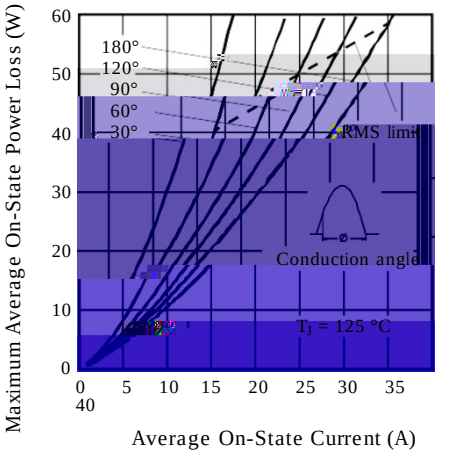


Fig. 3 - On-State Power Loss Characteristics

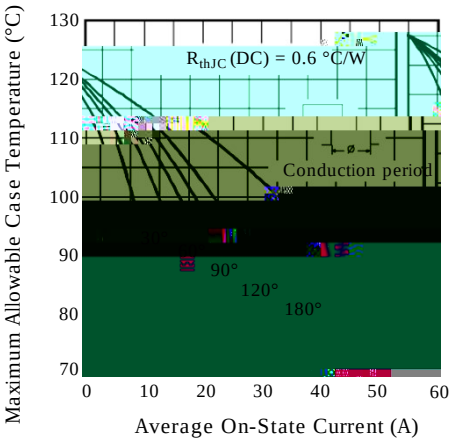


Fig. 2 - Current Rating Characteristics

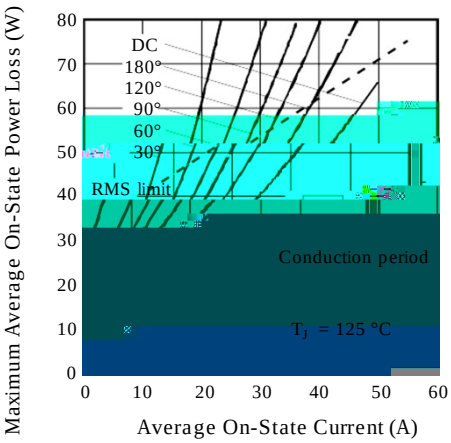


Fig. 4 - On-State Power Loss Characteristics

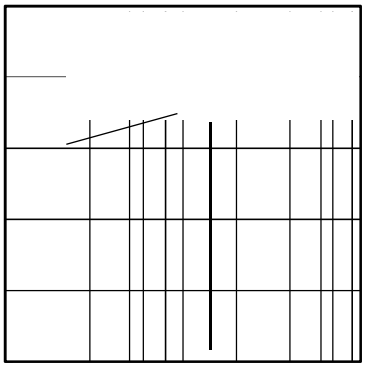


Fig. 5 - Maximum Non-Repetitive Surge Current

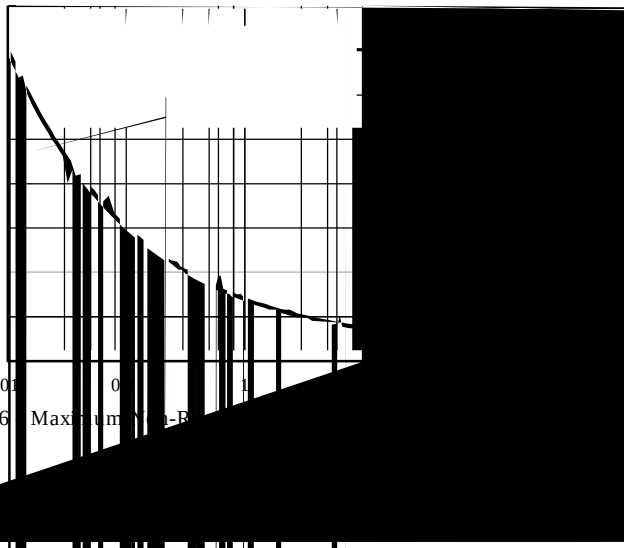


Fig. 6 - Maximum Non-R

in millimeters and inches