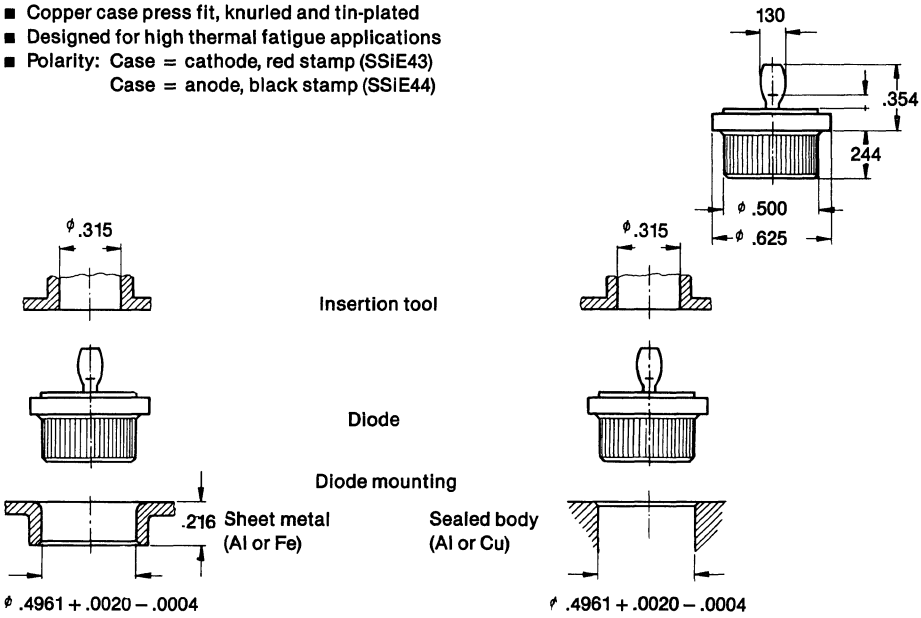
- Copper case press fit, knurled and tin-plated
- Designed for high thermal fatigue applications
- Polarity: Case = cathode, red stamp (SSiE43)
  Case = anode, black stamp (SSiE44)



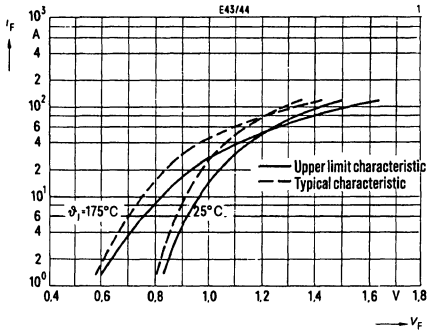
Type	Ordering Code	Repetitive peak reverse voltage V_{RRM}	Surge peak reverse voltage V_{RRM}
SSIE4360	C66047-A1066-A4	1100V	1100V
SSIE4383	C66047-A1066-A5	1500V	1500V
SSIE4460	C66047-A1066-A9	1100V	1100V
SSIE4483	C66047-A1066-A10	1500V	1500V

Electrical Characteristics

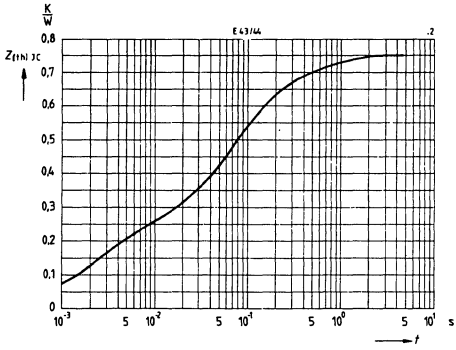
Forward Conducting			
Max. RMS current	$I_{F(RMS)}$	55 Amps	T_C = 120°C
Max. average current	$I_{F(AVG)}$	35 Amps	T_C = 120°C, half sine
Max. peak voltage	V_{FM}	1.2 Volts	I_{FM} = 50 Amps
Max. peak 1 cycle surge current	I_{FSM}	300 Amps	T_J = 175°C, 60HZ
Max. I^2t for fusing	I^2t	340 A^2sec	T_J = 175°C, t = 8.3 ms
Thermal Values			
Max. DC thermal resistance, junction to case	$R\Theta_{JC}$	1.0C/W	
Operating junction temp. range	T_J	-40°C to +175°C	
Storage temperature range	T_{stg}	-40°C to +175°C	
Blocking			
Max. reverse leaking current	I_{RRM}	4 mA	T_J = 175°C, V_R = V_{RRM}
Mechanical Characteristics			
Max. press-in force	867 lb		
Weight	Approximately 0.35 ounces (10 grams)		

(1) T_C = 25°C unless otherwise indicated

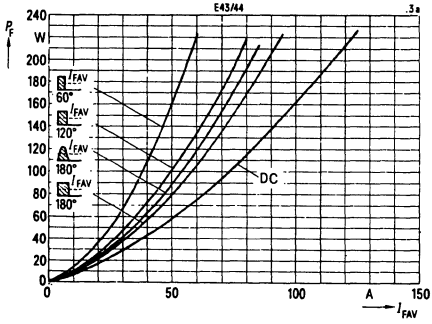
Forward characteristic curves
Parameter: junction temperature ϑ_j



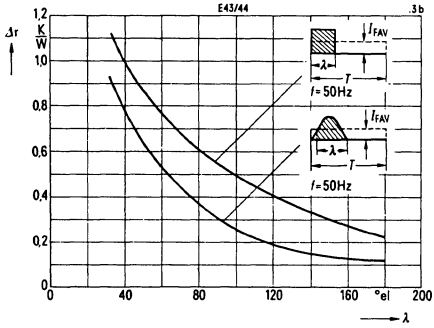
Transient thermal resistance
for constant current $Z_{(th)JC}$



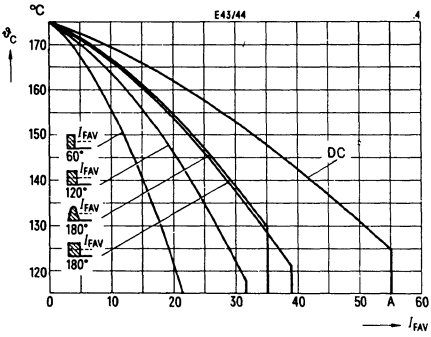
Forward power dissipation characteristic curves
Parameter: current waveform



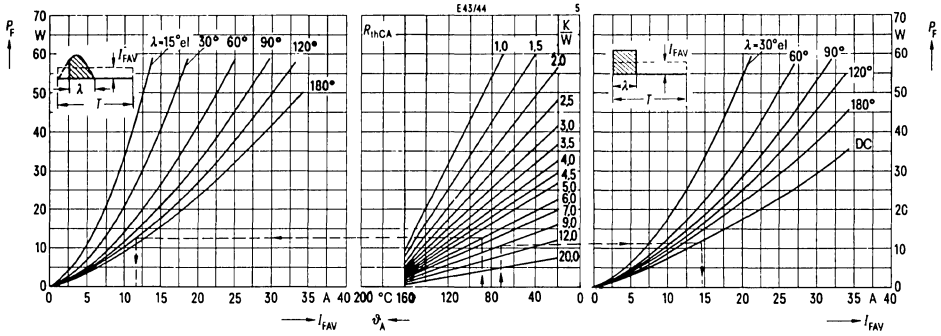
Thermal resistance Δr
Parameters: frequency f, current waveform



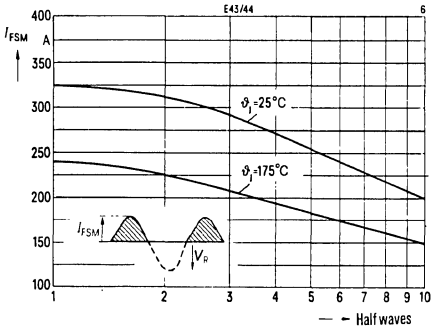
Permissible case temperature ϑ_c
versus forward current,
mains operation 40 to 60 Hz



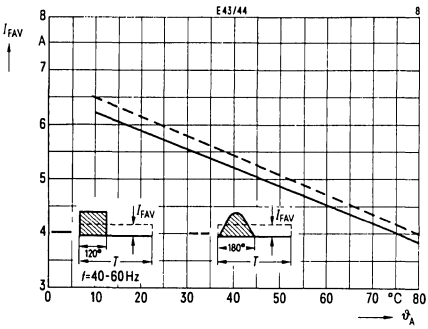
Forward power dissipation characteristic curves,
nomogram for determining max. mean forward currents (limit value)
for various cooling conditions, mains operation 40 to 1000 Hz



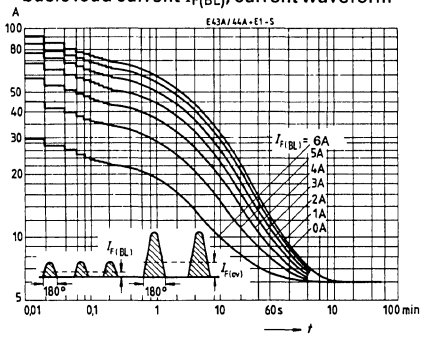
Maximum current characteristic curves
Parameter: junction temperature ϑ_j
$V_R \leqq 0.8\ V_{RRM}$



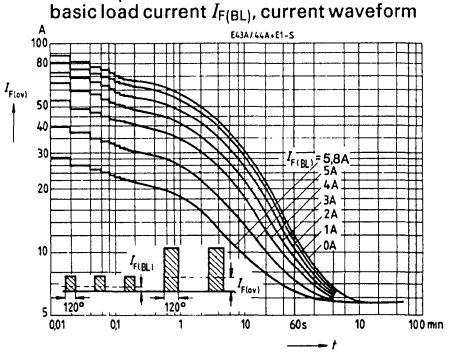
Max. mean forward current $I_{FAV(I)}$ for heat sink E1
and mounting on a printed circuit board
versus cooling air temperature ϑ_A,
mains operation 40 to 60 Hz, natural air cooling



Overcurrent characteristic curves (mean value)
for heat sink E 1, cooling type (S), $\vartheta_A = 45°C$,
mains operation 40 to 60 Hz. Parameters:
basic load current $I_{F(BL)}$, current waveform



Overcurrent characteristic curves (mean value)
for heat sink E 1, cooling type (S), $\vartheta_A = 45°C$,
mains operation 40 to 60 Hz. Parameters:
basic load current $I_{F(BL)}$, current waveform



Intermittent operation with basic load for heat sink E 1,
cooling type (S), $\vartheta_A = 25°C$, mains operation 40 to 60 Hz. Parameters:
basic load current $I_{F(BL)}$, cycle time SD, current waveform