SEMTECH

SUPERFAST RECOVERY DOUBLER AND CENTER TAPS

SCDA05FF - SCDA15FF
SCNA05FF - SCNA15FF
SCPA05FF - SCPA15FF

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SUPERFAST RECOVERY, MEDIUM CURRENT CENTER TAP AND DOUBLER RECTIFIER ASSEMBLIES

- Low forward voltage drop
- Low reverse leakage current
- Aluminum case
- Low thermal impedance
- Very low reverse recovery time

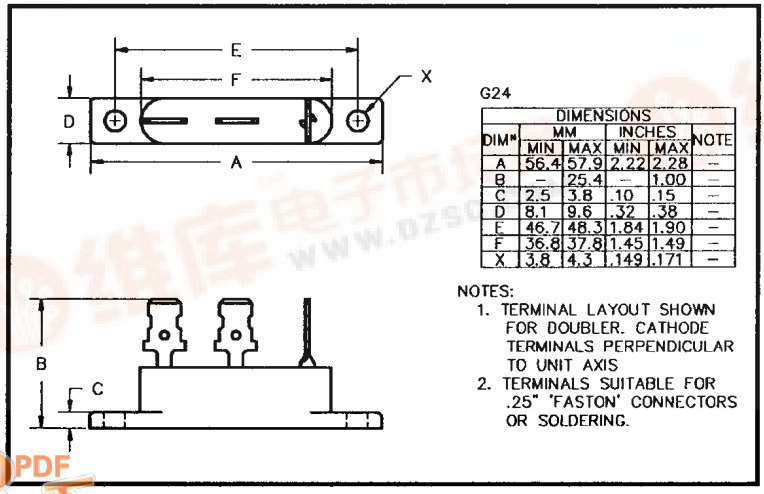
QUICK REFERENCE DATA

- V_R = 50V - 150V
- I_F = 15A
- I_R = 10µA
- t_{rr} = 30nS

ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage V_{RWM}	Average Rectified Current (@ case temperature)			Average Rectified Current (@ ambient temperature)			1 Cycle Surge Current t_p = 8.3mS		Repetitive Surge Current
		55°C	100°C	125°C	25°C	55°C	100°C	25°C	100°C	25°C
	Volts	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps
SCDA05FF SCDA10FF SCDA15FF	50 100 150	7.5	5.0	2.5	2.25	1.75	1.0	175	120	24
SCNA05FF SCNA10FF SCNA15FF	50 100 150	15	10	5	4.5	3.5	2.0	175	120	24
SCPA05FF SCPA10FF SCPA15FF	50 100 150	15	10	5	4.5	3.5	2.0	175	120	24

MECHANICAL



G24

DIM*	DIMENSIONS MM MIN	MM MAX	INCHES MIN	INCHES MAX	NOTE
A	56.4	57.9	2.22	2.28	–
B	–	25.4	–	1.00	–
C	2.5	3.8	.10	.15	–
D	8.1	9.6	.32	.38	–
E	46.7	48.3	1.84	1.90	–
F	36.8	37.8	1.45	1.49	–
X	3.8	4.3	.149	.171	–

NOTES:
1. TERMINAL LAYOUT SHOWN FOR DOUBLER. CATHODE TERMINALS PERPENDICULAR TO UNIT AXIS
2. TERMINALS SUITABLE FOR .25" 'FASTON' CONNECTORS OR SOLDERING.

Maximum thermal impedance
$R_{\theta JC}$ = 4°C/W

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ELECTRICAL CHARACTERISTICS (ratings apply per leg)

Device Type	Reverse Current @ V_{RWM}		Maximum Forward Voltage V_F @ 5.0A @ 25°C	Maximum Reverse Recovery Time [1]
	@ 25 °C	@ 100 °C		
	µA	µA	Volts	nS
SCDA05FF SCDA10FF SCDA15FF	10	500	0.97	↑
SCNA05FF SCNA10FF SCNA15FF	10	500	0.97	30
SCPA05FF SCPA10FF SCPA15FF	10	500	0.97	↓

[1] Measured on discrete devices prior to assembly

Operating temperature range	-55 °C to +150 °C
Storage temperature range	-55 °C to +150 °C

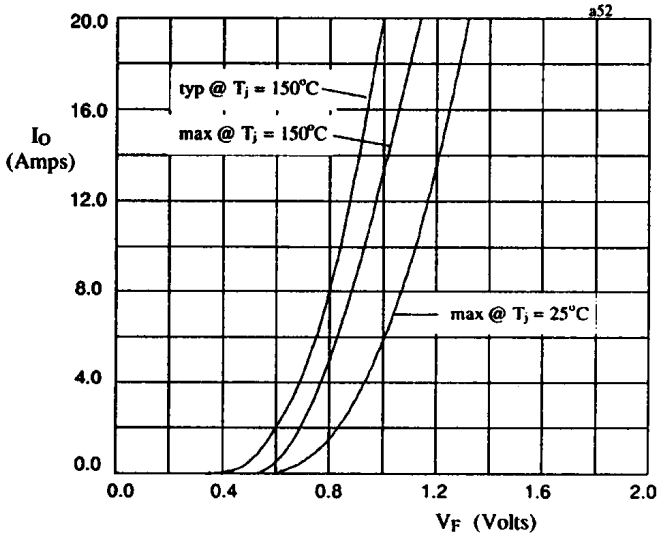

Fig 1. Forward voltage drop against current (per leg)

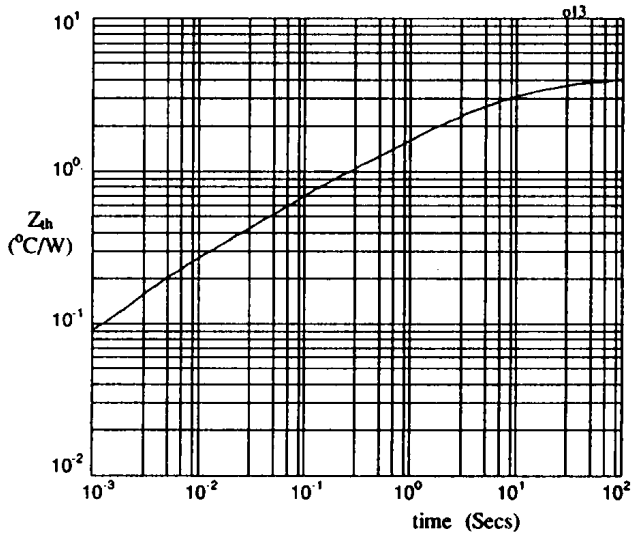

Fig 2. Transient thermal impedance characteristic per leg