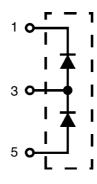


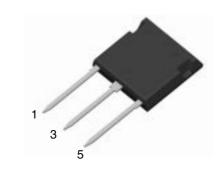
Dual HiPerFRED™ Epitaxial Diode

in ISOPLUS i4-PAC™

DSEE 55-24N1F

 $V_{RRM} = 2400 V$ $I_{F(AV)M} = 55 A$ $t_{rr} = 220 \text{ ns}$





Rectifier Bridge

Symbol	Conditions	Maximum	laximum Ratings	
V _{RRM} ① V _{RRM}		2400 1200	V V	
I _{FAV} I _{F(AV)M} I _{FSM}	T_{c} = 90°C; sine 180° T_{c} = 90°C; d = 0.5 rectangular T_{vJ} = 25°C; t = 10 ms; sine 50 Hz	53 55 500	A A A	
E _{AS}	I_{AS} = 16 A; L_{AS} = 180 μ H; T_{C} = 25°C; non repetitive	e 28	mJ	
P _{tot}	$T_C = 25^{\circ}C$ (per diode)	200	W	

Symbol Conditions Characteristic Values (T_{vv} = 25°C, unless otherwise specified)

	min.	typ.	max.	,
V _F	$I_F = 40 \text{ A}; T_{VJ} = 25^{\circ}\text{C}$ $T_{VJ} = 125^{\circ}\text{C}$	2.0 1.5	2.5	V V
I _R	$V_{R} = V_{RRM}; T_{VJ} = 25^{\circ}C$ $T_{VJ} = 125^{\circ}C$	1	1	mA mA
I _{RM} t _{rr}	$\begin{cases} I_F = 75 \text{ A; } di_F/dt = -750 \text{ A/}\mu\text{s; } T_{VJ} = 125^{\circ}\text{C} \\ V_R = 600 \text{ V} \end{cases}$	79 220		A ns
R _{thJC}	(per diode)		0.63	K/W

Data according to IEC 60747 and refer to a single diode unless otherwise stated.

 $\ensuremath{\mathbb{O}}$ Diodes connected in series

Features

- HiPerFRED™ Epitaxial Diodes
- fast and soft reverse recovery low switching losses
- avalanche rated
- low leakage current
- ISOPLUS i4-PAC™ package
- isolated back surface
- low coupling capacity between pins and heatsink
- enlarged creepage towards heatsink
- enlarged creepage between pins
- application friendly pinout
- high reliability
- industry standard outline

Applications

- rectifiers
 - high frequency rectifiers, output rectifiers of switched mode power supplies
- mains rectifiers with minimized emission of disturbances
- diodes in snubber networks
- high voltage diodes using the series connection in the component





Component					
Symbol	Conditions	Maximum R	Maximum Ratings		
T _{VJ}		-55+150 -55+125	°C °C		
V _{ISOL}	I _{ISOL} ≤ 1 mA; 50/60 Hz	2500	V~		
F _c	mounting force with clip	20120	N		

Symbol	Conditions	Ch	Characteristic Values	
		min.	typ.	max.
C _P	coupling capacity between shorted pins and mounting tab in the case		40	pF
d_s, d_A d_s, d_A	pin - pin pin - backside metal	5.5 5.5		mm mm
R _{thCH}	with heatsink compound		0.15	K/W
Weight			9	9

