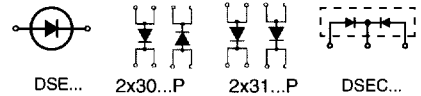


FRED Diodes

Fast Recovery Epitaxial Diodes (FRED)

$I_{FAV} = 6 - 120 \text{ A}$



Type	V_{RRM}	$I_{FAV} @ T_C$	I_{FRMS}	$I_{FSM} 10 \text{ ms}$	$V_F @ I_F$	$t_{rr} \text{ typ.}$	$I_{RM} @ -di/dt$	R_{thJC}	$P_{tot} \text{ max.}$	Fig. No.	Package style
$T_{VJM} = 150^\circ\text{C}$ New	V	A	$^\circ\text{C}$	$T_{VJM} \text{ A}$	$T_{VJ} = 150^\circ\text{C}$	$T_{VJ} = 25^\circ\text{C}$	$T_{VJ} = 100^\circ\text{C}$	K/W	W		Outline drawings on page 91-100
DSEI 6-06AS	600	6 125	16	65	1.3 8	35	2.5 64	3.0	42	2	Fig. 2 TO-252 AA Weight = 0.3 g
DSEI 8-06A	600	8 115	16	100	1.3 8	35	2.5 64	2.5	50	4	Fig. 4 TO-220 AC Weight = 2 g
DSEI 8-06AS	600	8 115	16	100	1.3 8	35	2.5 64	2.5	50	5a	
DSEI 12-06A	600	14 100	25	100	1.5 16	35	4 100	2.0	62	4	
DSEI 12-10A	1000	12 100	25	75	2.1 12	50	6.5 100	1.6	78		
DSEI 12-12A	1200	11 100	25	75	2.2 12	50	6.5 100	1.6	78		Fig. 5a TO-263 AB Weight = 2 g
DSEI 20-12A	1200	17 85	70	130	1.87 12	40	7 100	1.6	78		
DSEI 19-06AS	600	20 65	25	100	1.5 16	35	4 100	2.0	61	5a	
DSEI 36-06AS	600	37 85	70	300	1.4 37	35	10 240	1.0	125	8	
DSEI 30-06A	600	30 85	70	200	2.0 36	35	16 240	0.9	138	7a	Fig. 6 TO-247 AD Weight = 6 g
DSEI 30-10A	1000	30 85	70	200	2.0 36	35	16 240	0.9	138	8	
DSEI 30-10AR	1000	30 85	70	200	2.0 36	35	16 240	0.9	138	8	
DSEI 30-12A	1200	26 85	70	200	2.2 30	40	16 240	0.9	138	8	
DSEI 60-02A	200	69 85	98	600	0.88 60	35	8 200	0.75	150		Fig. 7 ISOPLUS247™ DCB isolated package Weight = 5 g
DSEI 60-06A	600	60 70	100	550	1.5 70	35	19 480	0.75	166		
DSEI 60-10A	1000	60 60	100	500	1.8 60	35	32 480	0.66	189		
DSEI 60-12A	1200	52 60	100	500	1.65 60	40	32 480	0.66	189		
DSEI 120-06A	600	126 70	100	600	1.12 70	35	17 200	0.35	357	8	Fig. 7a ISOPLUS247™ DCB isolated package Weight = 5 g
DSEI 120-12A	1200	109 60	100	600	1.16 70	40	16 200	0.35	357		
DSDI 60-14A	1400	63 60	100	500	2.6 70	40	85 500	0.4	416		
DSDI 60-16A	1600										
DSDI 60-18A	1800										Fig. 8 TO-247AD Weight = 6 g
DSEK 60-02A	200	2x34 115	50	325	0.85 30	35	4 100	1.0	125	6	
DSEK 60-02AR	200	2x34 85	50	325	0.85 30	35	4 100	1.0	125	7	
DSEK 60-06A	600	2x30 85	50	300	1.4 37	35	10 240	1.0	125	6	
DSEK 60-12A	1200	2x26 85	50	200	2.2 30	40	16 240	1.9	125	6	
DSEI 2x30-06P	600	2x30 85	70	300	1.4 30	35	10 240	1.25	100	24	Fig. 10 TO-268 AA24 Weight = 6 g
DSEI 2x30-10P	1000	2x30 50	70	200	2.0 30	35	16 240	1.25	100		
DSEI 2x30-12P	1200	2x28 50	70	200	2.2 30	40	16 240	1.25	100		
DSEI 2x30-04C	400	2x30 85	70	300	1.4 30	35	10 240	1.25	100	12	
DSEI 2x30-06C	600	2x30 85	70	300	1.4 30	35	10 240	1.25	100		Fig. 12 SOT-227B miniBLOC Weight = 30 g
DSEI 2x30-10B	1000	2x30 50	70	200	2.0 36	35	16 240	1.25	100		
DSEI 2x30-12B	1200	2x28 50	70	200	2.2 30	40	16 240	1.25	100		
DSEI 1x31-06C	600	30 85	70	300	1.4 30	35	10 240	1.25	100		
DSEI 2x31-06P	600	2x30 85	70	300	1.4 30	35	10 240	1.25	100	24	Fig. 8 TO-247AD Weight = 6 g
DSEI 2x31-10P	1000	2x30 50	70	200	2.0 30	35	16 240	1.25	100		
DSEI 2x31-12P	1200	2x28 50	70	200	2.2 30	40	16 240	1.25	100		
DSEI 2x31-04C	400	2x30 85	70	300	1.4 30	35	10 240	1.25	100	12	
DSEI 2x31-06C	600	2x30 85	70	300	1.4 30	35	10 240	1.25	100		Fig. 10 TO-268 AA24 Weight = 6 g
DSEI 2x31-10B	1000	2x30 50	70	200	2.0 30	35	16 240	1.25	100		
DSEI 2x31-12B	1200	2x28 50	70	200	2.2 30	40	16 240	1.25	100		
DSEI 1x31-06C	600	30 85	70	300	1.4 30	35	10 240	1.25	100		

Fig. 10 TO-268 AA24
Weight = 6 g



Fig. 24 ECO-PAC 1
Weight = 19 g

See datasheet for pin arrangement



Fig. 12 SOT-227B miniBLOC
Weight = 30 g

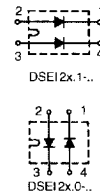
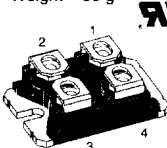


Fig. 8 TO-247AD
Weight = 6 g

