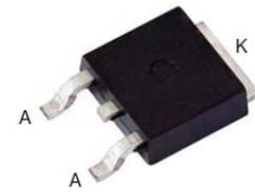


Features

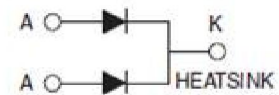
- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Metal of silicon rectifier, majority carrier conduction
- Low forward voltage, high efficiency
- Guarding for over voltage protection



TO-252 (D-PAK)

Mechanical Data

- Case: Epoxy, Molded
- Weight: 0.4grams(approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 sec
- Shipped 2500 units per reel



Schematic Diagram

Maximum Ratings & Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Test Conditions	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	V
Working Peak Reverse Voltage		V_{RWM}	100	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Average Forward Rectified Current at $T_c=105^\circ\text{C}$ Total Device per Diode		$I_F(AV)$	20 10	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load per Diode		I_{FSM}	150	A
Voltage Rate of Change(rated V_R)		DV/dt	10000	V/us
Peak Repetitive Reverse Current per Leg at $t_p=2.0\mu\text{s}$, 1KHz		I_{RRM}	1.0	A
Operating Junction Temperature Range		T_J	-55 to+150	$^\circ\text{C}$
Storage Temperature Range		T_{STG}	-55 to+150	$^\circ\text{C}$
Maximum Instantaneous Forward Voltage per Leg	$I_F=10\text{A}$ $T_C=25^\circ\text{C}$ $I_F=10\text{A}$ $T_C=125^\circ\text{C}$	V_F	0.84 0.75	V
Maximum Reverse Current per Leg at Working Peak Reverse Voltage	$T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$	I_R	200 15	μA μA

Thermal Characteristics

Parameter	Symbol	Value	Unit
Thermal Resistance, Junction to Case per Leg	$R_{\theta JC}$	3.5	$^\circ\text{C}/\text{W}$
Thermal Resistance, Junction to Ambient per Leg	$R_{\theta JA}$	62.5	$^\circ\text{C}/\text{W}$

Note: Pulse test:300us pulse width, duty cycle=2%

Typical Characteristics Curves

Fig. 1 - Forward Current Derating Curve

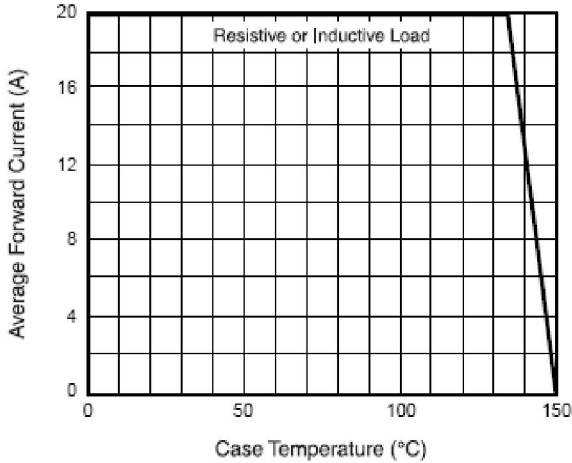


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

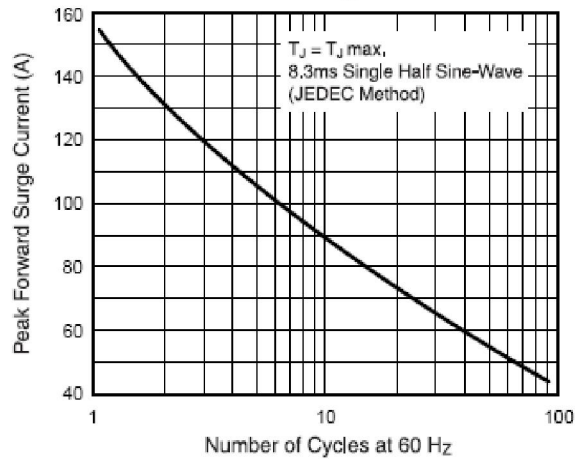


Fig. 3 - Typical Instantaneous Forward Characteristics

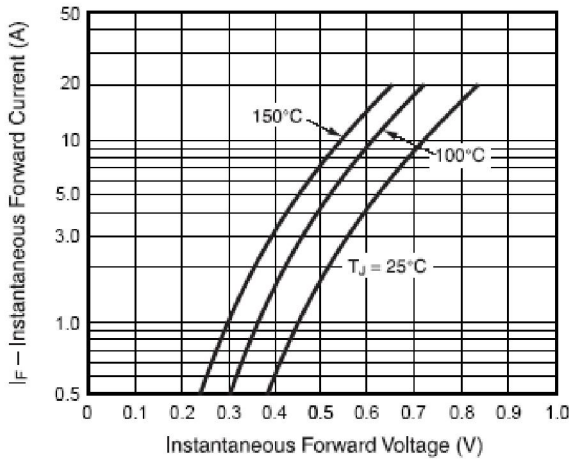


Fig. 4 - Typical Reverse Characteristics

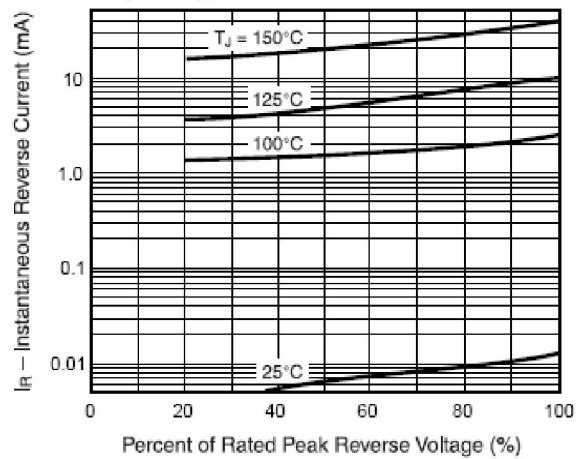
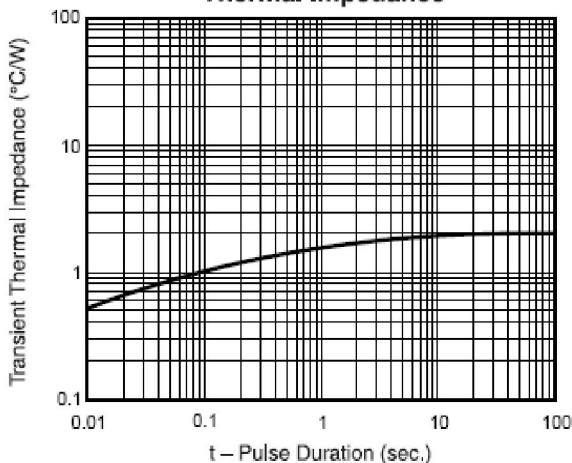
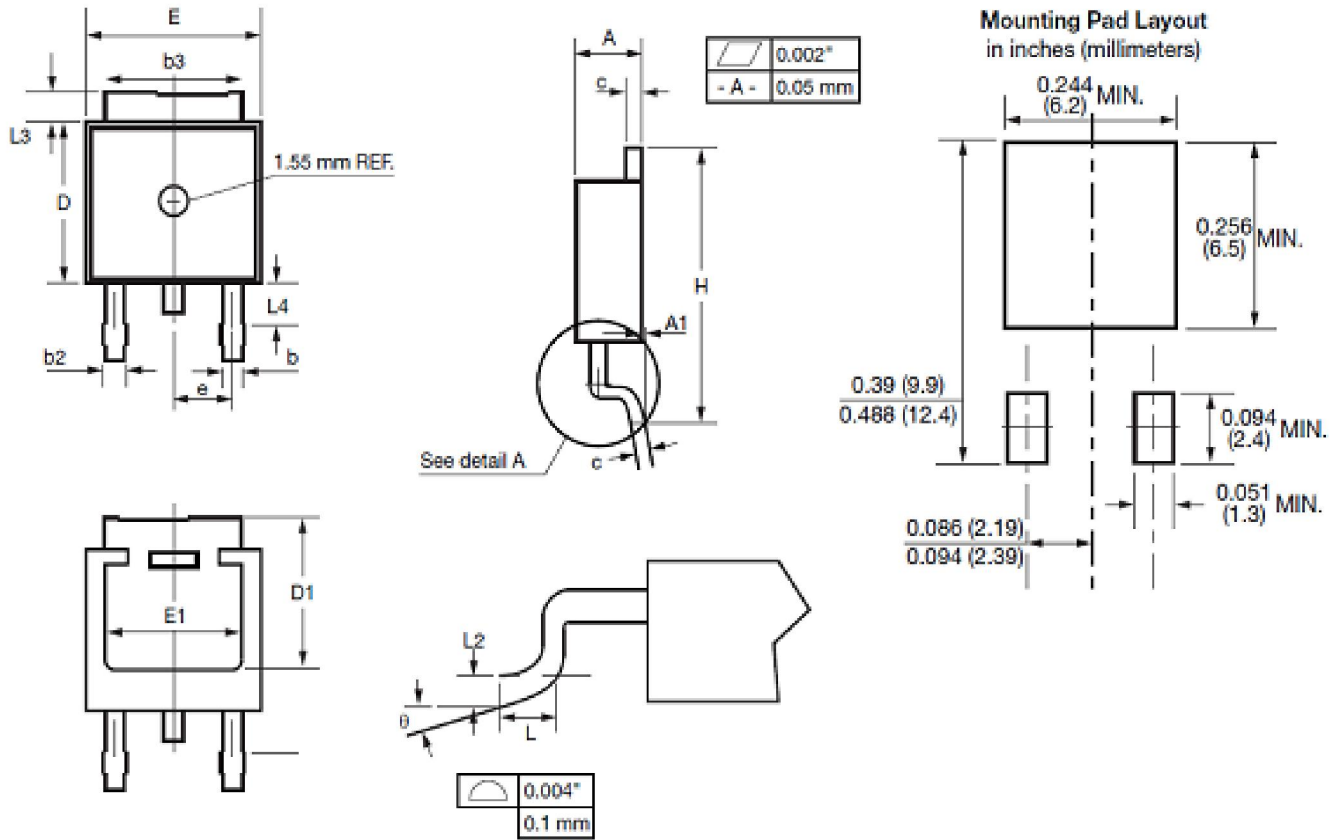


Fig. 5 - Typical Transient Thermal Impedance



Package Outline Dimensions TO-252 (D-PAK)



SYMBOL	INCHES		MILLIMETERS	
	MIN.	MAX.	MIN.	MAX.
A	0.086	0.094	2.19	2.38
A1	-	0.005	-	0.13
b	0.025	0.035	0.64	0.89
b2	0.033	0.045	0.84	1.14
b3	0.205	0.215	5.21	5.46
c	0.018	0.024	0.46	0.61
D	0.235	0.250	5.97	6.22
D1	0.205	-	5.21	-
E	0.250	0.265	6.35	6.73
E1	0.190	-	4.83	-
e	0.090 BSC.		2.29 BSC.	
H	0.380	0.410	9.65	10.41
L	0.055	0.070	1.40	1.78
L2	0.020 BSC.		0.51 BSC.	
L3	0.035	0.050	0.89	1.27
L4	0.025	0.039	0.64	1.01
θ	0°	8°	0°	8°

Note

- Conforms to JEDEC TO-252 variation AA except dimension "D"