

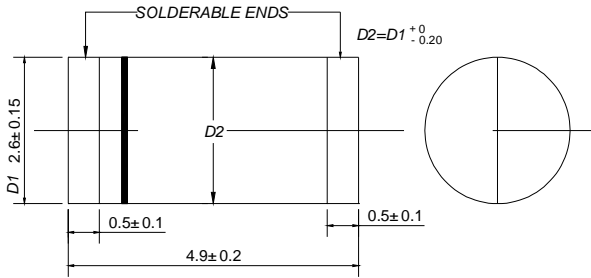


DLFR101 THRU DLFR107

SURFACE MOUNT RECTIFIERS

VOLTAGE RANGE : 50 --- 1000 V CURRENT: 1.0 A

DO - 213AB



Dimensions in millimeters

FEATURES

Plastic package has underwriters laboratories flammability classification 94V-0
 Glass passivated chip junction
 For surface mount applications
 High temperature metallurgically bonded construction
 Cavity-free glass passivated junction
 High temperature soldering guaranteed:450 /5 seconds at terminals.Complete device sub-mersible temperature of 265 for 10 seconds in solder bath

MECHANICAL DATA

Case: JEDEC DO-213AB,molded plastic
 Terminals: Axial lead ,solderable per MIL- STD-750,Method 2026
 Polarity: Color band denotes cathode
 Weight: 0.0046 ounces, 0.116 grams
 Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate current by 20%.

MDD CatalogNumber		DL	DL	DL	DL	DL	DL	DL	UNITS
		FR101	FR102	FR103	FR104	FR105	FR106	FR107	
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current $T_T=55$	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Maximum instantaneous forward voltage @1.0A	V_F	1.3							V
Maximum reverse current @ $T_A=25$ at rated DC blocking voltage @ $T_A=125$	I_R	5.0 50							μA
Maximum reverse recovery time (Note 1)	t_{rr}	150				250	500		ns
Typical junction capacitance (Note 2)	C_j	15							pF
Typical thermal resistance (Note 3)	R_{0JA}	75							/W
Operating junction temperature range	T_j	- 55 ---- +175							
Storage temperature range	T_{STG}	- 55 ---- +175							

NOTE: 1. Measured with $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient, 0.24x0.24"(6.0x6.0mm) copper pads to each terminal.

MDD ELECTRONIC

RATINGS AND CHARACTERISTIC CURVES DLFR101 THRU DLFR107

FIG.1 – FORWARD CURRENT DERATING CURVE

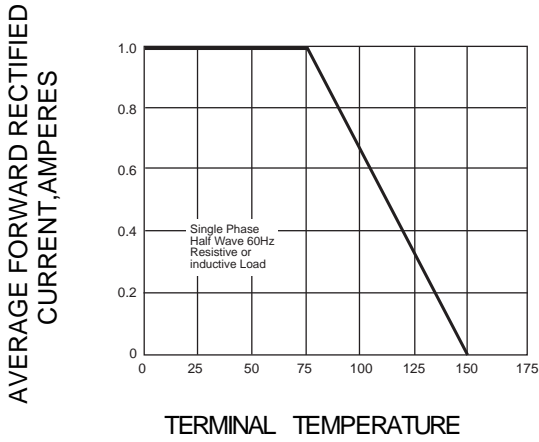


FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

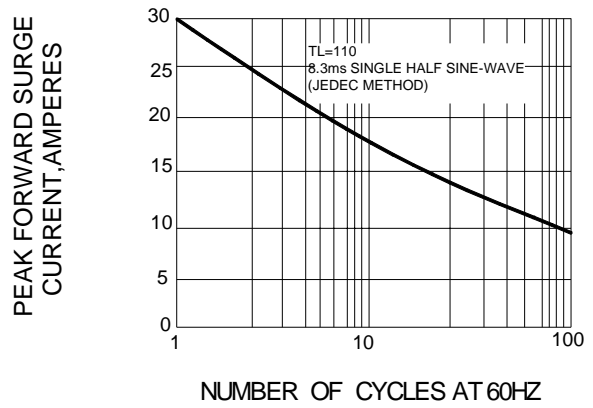


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

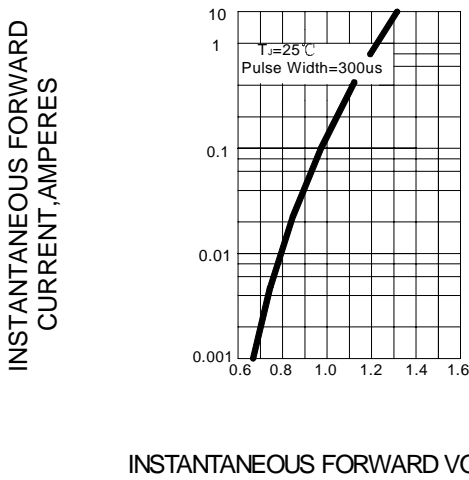


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

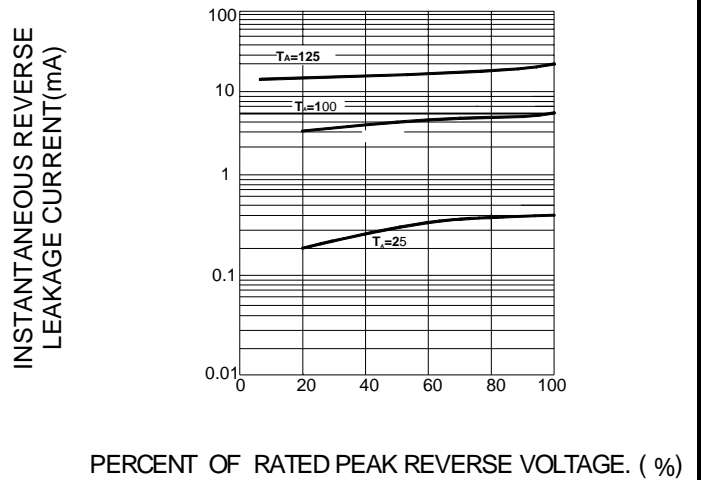


FIG.5 – TYPICAL JUNCTION CAPACITANCE

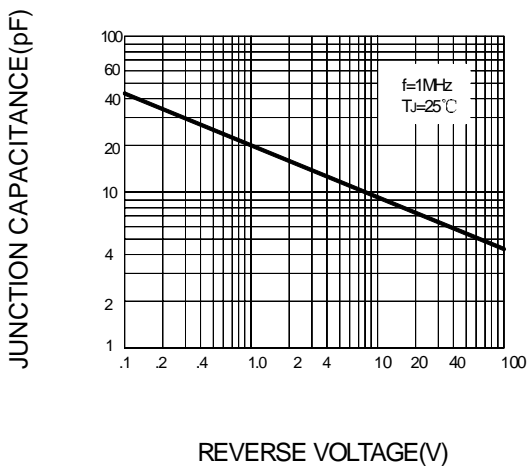


FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE

